

A YOUNG GIRL'S ROOM WITH FLOWERED CRETTONNE HANGINGS

HARPER'S 32
HANDY-BOOK
FOR GIRLS

EDITED BY
ANNA PARMLY PARET

ILLUSTRATED



HARPER & BROTHERS PUBLISHERS
NEW YORK AND LONDON
MCMX

Copyright, 1910, by HARPER & BROTHERS

All rights reserved

Published February, 1910

Printed in the United States of America

© CLA 256678

CONTENTS

Part I

THE HOME

	PAGE
CHAPTER I.—WHAT CAN BE DONE IN SLEEPING-ROOMS	3
THE TREATMENT OF WALLS	PRACTICAL EXAMPLES
THE DRAPERIES	BUREAU AND TABLE COVERS
A CORNER DRESSING-TABLE	
CHAPTER II.—THE POSSIBILITIES OF WINDOWS	14
WINDOW-CURTAINS	A "BULL'S-EYE" WINDOW
CHAPTER III.—WINDOW GARDENS	22
SOME PANEL DESIGNS	THE FLOWERS
PLASTER-OF-PARIS PANELS	THE PLANTING
CHAPTER IV.—PICTURES AND PHOTOGRAPHS	32
ETCHINGS, ENGRAVINGS, AND PRINTS	FRENCH AND ENGLISH ART
UNHACKNEYED SUBJECTS	FRAMING AND HANGING
THE ITALIAN MASTERS	PHOTOGRAPHIC POSSIBILITIES
THE FLEMISH SCHOOL	A BLUE-AND-WHITE FRIEZE
	A MUSICAL FRIEZE
	THE NURSERY
CHAPTER V.—HOME-MADE FIRE-SCREENS	49
THE FRAMES	THE COVERING
	THE DECORATION

CONTENTS

	PAGE
CHAPTER VI.—ART IN THE HOUSEHOLD	53
LAMPS AND SHADES	FENDERS AND FIRE-SETS
CLOCKS AND VASES	WARMING-PANS AND CHAFING-
POTTERY	DISHES
CASTS	KNOCKERS AND LATCHES
OLD BRASSES	DUTCH BRASSES
CANDLESTICKS	RUSSIAN BRASSES
	DAMASCUS WORK

Part II

ARTS AND CRAFTS

CHAPTER VII.—SIMPLE CARPENTRY	73
TOOLS	AN EASEL
JOINTS	HANGING BOOK-SHELVES
A LOW BENCH	A PLANT-BOX
A STEP-BENCH	A PHOTOGRAPH-BOX
A SHOE-BOX	AN IMPROVED LUNCH-BOX
CHAPTER VIII.—WOOD-CARVING	88
TOOLS	RELIEF-CARVING
CHIP-CARVING	THE "APPLIED" METHOD
CHAPTER IX.—WIRE-WORK	100
A BIRD-CAGE BRACKET	A FAIRY LAMP
A PHOTOGRAPH EASEL	A PICTURE-FRAME
A MATCH-BOX	A GLOVE-BOX
CHAPTER X.—LEATHER-WORKING	106
THE MATERIAL	AN OPERA-BAG
THE PROCESS	TOOLED AND EMBROIDERED
A CARD-CASE	LEATHER TRIMMINGS
A BOOK-COVER	A COLLAR-AND-CUFF SET
A TABLE-MAT	LEATHER EMBROIDERY

CONTENTS

CONTENTS

	PAGE
CHAPTER XVIII.—RAFFIA BASKETS	188
DETAILS OF WEAVING	A QUICKE R STITCH
As to DESIGNS	
CHAPTER XIX.—HAND-WOVEN RUGS	193
THE LOOM IN THE HOME	THE COLORS
THE MATERIAL	PRACTICAL HINTS
Part III	
NEEDLEWORK AND MILLINERY	
CHAPTER XX.—SIMPLE DRESS-MAKING LESSONS . . .	201
THE FIRST DAY'S LESSON	APPLYING MEASURES TO PATTERN
HOW TO MEASURE	GRADING THE SLEEVE PATTERN
THE SECOND DAY'S LESSON	THE THIRD DAY'S LESSON
CHAPTER XXI.—DETAILS OF DRESS FINISHING . . .	219
FACING SKIRTS	ON MAKING PLACKETS
FINISHING THE TOP OF FACING	INVERTED PLEAT AT THE BACK
LINED SKIRTS	OF A SKIRT
CHAPTER XXII.—MAKING A SET OF MUSLIN GARMENTS	228
CUTTING THE GARMENT	HOW TO CUT A PATTERN
A CORSET-COVER	
CHAPTER XXIII.—MAKING FANCY APRONS	235
CHAFING-DISH APRONS	A POINTED APRON
AN APRON OF INDIA LAWN	A COLORED APRON
A FITTED LACE-TRIMMED APRON	
CHAPTER XXIV.—HOME MILLINERY	241
SUMMER HATS	

CONTENTS

	PAGE
CHAPTER XXV.—EMBROIDERY FOR GIRLS	252
OUTLINE PICTURES	GENERAL PRINCIPLES
THE NEW ENGLAND STITCH	SILKS
COLORS	SIMPLE PATTERNS
DARNING BACKGROUNDS	A CHINESE DESIGN

Part IV

G I F T S

CHAPTER XXVI.—HINTS TO SANTA CLAUS	271
BUTTON'S CHUM	A STAR-SHAPED PAPER BOX
A TOY FOR THE BABY	A CIRCULAR PAPER BOX
A SOFT WORSTED BALL	SQUARE BOX WITH COVER
PERFUMED LININGS FOR BUREAU DRAWERS	ATTACHED RIBBON FAVORS
PHOTOGRAPH OR MUSIC RACK	A HOLDER FOR RIBBONS
MINIATURE "CRATES" FOR BON- BONS	NEEDLE - BOOKS AND UTILITY BAGS
	RIBBON-COVERED BOXES

CHAPTER XXVII.—EASTER FAVORS	285
FANCY EASTER EGGS	AN EGGLFUL OF CANDIES

(

Part V

OUT-OF-DOORS

CHAPTER XXVIII.—HOME-MADE HAMMOCK	293
	HOW TO MAKE IT

CHAPTER XXIX.—AT THE SEA-SHORE	296
THE SEA-WEED ZONES	A FIELD PRESS
MOUNTING SEA-WEED	SHELL SET FOR WRITING-TABLE
A SEA-WEED PRESS	SHELL DECORATION

CONTENTS

	PAGE
CHAPTER XXX.—SALT AND FRESH WATER AQUARIUMS	302
SCALLOPS, SHRIMPS, AND SNAILS	CADDIS-WORMS
HERMIT-CRABS AND PIPE-FISH	STICKLEBACKS AND DRAGON-
A FRESH-WATER AQUARIUM	FLIES
	TADPOLES AND ROCK-FISH
CHAPTER XXXI.—BUTTERFLY COLLECTING	314
THE MOUNTING OF BUTTERFLIES	
Part VI	
AMUSEMENTS AND MISCELLANY	
CHAPTER XXXII.—PRIVATE THEATRICALS	321
A HOME-MADE STAGE	SCENERY
THE PROSCENIUM FRAME	PROMPT - BOOK AND STAGE-
THE CURTAIN	PLOT
THE ARRANGEMENT OF LIGHTS	THE SCENE-PLOT
	THE PROPERTY-PLOT
CHAPTER XXXIII.—THE DINING-TABLE	337
THE SETTING OF THE TABLE	THE LUNCHEON-TABLE
CHAPTER XXXIV.—PICNIC LUNCHEONS	342
GETTING READY	SANDWICHES
THE SALAD	CAKE
	FRAPPED FRUITS

INTRODUCTION

THE success of *Harper's Practical Books for Boys* has brought the publishers many requests for a *Handy-book for Girls* which should be modern, attractive, and practical. In preparing this book the editor has consulted many experts in various departments, and has used the wide facilities of *Harper's Bazar* to test the tastes of girls of the present day, and also to introduce new opportunities for interesting achievement.

This book points the way to all those delightful home arts and industries that the average girl loves. It tells a girl enough about each subject to guide her in her first experiments—enough to help her to decide which path of the many indicated she wishes to follow if she cares to specialize; in other words, it will serve to rouse to action any dormant talent the girl possesses, whether domestic, artistic, or social. In the meantime, while she is experimenting, the help that she gets from this book will show her how to find amusement in doing things for herself, and how to make many sides of her home and social life more attractive.

Just as modern geography begins at the door-step, this book starts from the girl's own room. After some general explanations and introduction the reader is shown how to

INTRODUCTION

arrange and beautify her room, and explanations are given of the many things which she can make for utility or adornment. From her room this plan is carried throughout the home, to show how the reader's own hands can aid in making the home beautiful.

The second part is occupied with arts and crafts. This offers instructions in simple carpentering, wood-carving, and metal-work, leather-work, tapestry, bead-work, and many other crafts, including chapters on the art of enamelling, jewelry-making, and block-printing by Mrs. Mabel Tuke Priestman.

The third part explains a very extensive variety of needle fancy-work, embroidery, and like subjects.

The fourth part shows how to make a tempting assortment of Christmas presents and Easter and other gifts. The next section of the book deals in general with outdoor possibilities, the collection and preservation of sea-weeds, herbariums, aquariums, the collection of butterflies, etc.

Other features of this comprehensive book include the social side of the home as regards ways of entertaining in the informal style suitable for young girls. Parties for special festival occasions are described, favors, and how to make them are included, and some general instruction is given in setting the table and decorating it for such entertainments. Amusements are touched upon with the purpose of widening the interest of a book which is designed to be a resource and a companion, providing entertainment as well as the training of eye and hand—a practical and comprehensive handy-book for American girls.

Part I
THE HOME

HANDY-BOOK FOR GIRLS

Chapter I

WHAT CAN BE DONE IN SLEEPING-ROOMS

THE twentieth century is rich in new interests for girls—interests of a kind which make for independence and pleasure. The time is long since past when sewing or painting ranked as a girl's chief occupation. The possibilities of arts and crafts, the many avenues to the joy of achievement opened to the trained eye and hand, are within the reach of girls, provided simple and practical guidance is afforded. The importance of such guidance and the necessity for interest are constantly kept in mind in these chapters, which avoid the embarrassments of complicated preparations and expense.

Naturally the home is the centre. The daughter of the family can help to make that home beautiful through aids in decoration and furnishing, which, with a little knowledge, she can supply herself. The life of the home also can be enriched in countless ways, and so the circle widens, including new interests, new ways of achievement, new pleas-

HANDY-BOOK FOR GIRLS

ures, and, through the practical knowledge gained, new openings to profit as well as pleasure.

In the home the natural starting-point is the girl's own room.

The smaller the bedroom, the greater the necessity for a bare floor and rug. It is impossible to keep it clean in any other way. Mattings tear easily, and ought not to be used in a room where a bed to be made must be pulled out from the wall. The bare floor is not injured by the moving, and its scratches can be concealed by a rug. Floors may be stained with a solution of permanganate of potash, the strength being tested to secure the proper shade. As this is only a water-color, it should not be used except on new wood or on wood which is free from varnish or grease. Grease and varnish, however, can always be removed from old floors or old wood with lye, well washed out, and then washed over with vinegar. After a stain has been applied, the floor, to be put in perfect condition, should receive one or more coats of filler, depending on how much the grain has been raised. After being rubbed with sandpaper, it may be waxed or finished only with shellac. The worst of floors can be successfully treated if these directions are followed. They were given me by an officer of our regular army, who follows them whenever he moves into new quarters.

Any painter or carpenter will sell you a walnut stain. This can be applied with a brush. A coat of shellac over the stain gives a good polish, and makes a floor presentable with little or no trouble. It can be kept shining after it has been washed by being rubbed with a coarse flannel dampened with a mere suggestion of oil.

The Treatment of Walls

In the treatment of the bedroom walls, the size of the room must be considered, the amount of light admitted, the position of the bed, and last, but by no means least, the owner's predilections for particular colors. These predilections should always be respected, although red should be used but sparingly in bedrooms. It is best never to have red walls. Red flowers on a white ground may be introduced, but the red must be broken and scattered. You can again use it in your draperies if you do so with discretion, and now and then a strong note of red in a chair or a bedspread may be permitted, but ordinarily red lacks the freshness and coolness which a bedroom should suggest.

There are an endless number of pretty and cheap papers to be found; those showing large flowers, however, are not to be thought of in small rooms. Paint in many instances is better than any paper, and if you know enough about mixing colors to direct the ordinary painter, or if you are sure of your man's appreciation of tones, painted walls, which can be wiped down at intervals, are strongly urged.

The Draperies

Hangings will enable you to give to each room a character of its own. Suppose, for instance, that you paint your woodwork white and your walls a delicate rose tint, using a pretty chintz, showing roses on a white ground, both at the windows and on the bed. Your room would assume a

HANDY-BOOK FOR GIRLS

certain quality at once. Enamelled white furniture or mahogany, or even a home-made chintz dressing-table and cushioned chairs, would help to give it a more individual air. The feeling of the room, again, might be altogether changed by the substitution of a soft, warm yellow for the rose, by those who love yellow better. The bed could then



Fig. 1

be covered with white, and the hangings at the windows be made of a soft yellow trimmed with ruffles of white lace. Blue or green might be used on the walls—yellows always, by-the-way, when the woodwork is oak. Still greater variety might be added by using blue, apple-green, or rose

WHAT CAN BE DONE IN SLEEPING-ROOMS

draperies with the different walls. These draperies, it goes without saying, should never be of wool nor any heavy stuff. You must have things that wash, unless all your appointments are so sumptuous that they entitle you to the use of silks or embroidered hangings; but even then your good taste might be questioned.

Some of the seven-cent flowered muslins are most charming when ruffled for curtains and covers, or when trimmed with a white cotton-ball fringe. With ordinary denim and dotted muslin, or even with cheese-cloth, any bedroom may be made charming. There are many chintzes that cost only fifteen or sixteen cents a yard. The printed Indian cottons are interesting, and the crétonnes, armures, scrims, cotton damasks, and taffetas all lend themselves with delightful results to the decoration of bedrooms. There is an infinite variety from which to make a selection, but it is never to be forgotten that however pretty the paper, a large flower has no place in a small room. Figured and flowered curtains also have no place in one hung with flowered or figured paper. Heavy curtains ought not to be lighter in tones than the walls. With an occasional portière the case alters, and again with certain Venetian silks taking up some one tone in the room.

Practical Examples

Burlaps make an excellent wall covering for small rooms, especially when a wall is likely to be rubbed by any one making the bed. It can be wiped off with ammonia and water, and picture-nails can be driven into it and pulled

HANDY-BOOK FOR GIRLS

out without leaving a mark. The room shown in Fig. 1 has a green burlap on the wall, the wood and ceiling being white. The candlesticks on the bureau are of green Dutch pottery. The bed has a valance and cover of green armure costing thirty-five cents a yard, and trimmed with a narrow yellow gimp shot with green, and costing ten cents a yard. In the middle of the spread, just below the pillow, the owner's monogram has been worked in with the yellow gimp. This monogram is repeated in the right-hand upper corner of the curtain. These monograms, by-the-way, must be enlarged with some skill. They must be drawn on a piece of paper, and the monogram pierced with a succession of pin-pricks. This paper is then placed on the spread and a white powder sprinkled over it. When the paper is removed, the monogram outlined in powder appears. Chinese white or even a piece of common chalk can then be used to fix the outline of the letters. A white bed in so small a room, and necessarily pushed close to the wall, would have presented too violent a contrast to the green burlaps. A light wall-paper, altering the conditions, would have necessitated an alteration in the treatment followed.

The "four-poster" shown in Fig. 2 has been hung with a flowered crétonne, low in tone to harmonize with the walls, the mahogany furniture and woodwork. This room is large enough to hold both a dressing and a night table with its candle at the head of the bed. The seat in front of the dressing-table, it will be noticed, has no back. Opposite this dressing-table the bureau and wash-stand are placed, while between them, with its head toward the windows and coming out from the wall, stands the lounge.

WHAT CAN BE DONE IN SLEEPING-ROOMS

Special attention should also be called to this arrangement, since, curiously enough, the disposition of the bedroom lounge often presents itself as a perplexing problem



Fig. 2

to householders, who imagine that it must go flat against the wall, or at the foot of the bed, or else go out of the room! The disposition of such a lounge, however, intended as it is for the owner's exclusive use, for her afternoon naps, or whatever quiet she takes with a book or a needle, is to

HANDY-BOOK FOR GIRLS

be studied from her point of view, not from that of the visitor, who, entering a parlor, must look about for a welcoming seat. The presence of this lounge is imperative in all bedrooms, and it is only when a room is too small to admit it that its absence is to be excused. It should have on it always a pillow or two, and a soft silk blanket neatly folded, for placing over the feet.

Bureau and Table Covers

Bureau and table covers should be so made that they can be sent to the wash once a week. This cannot be done when muslins with dainty laces and ribbons are used. Ribbons, for all the daintiness which they suggest, belong only to the bedrooms of the rich, who can afford to throw them away the moment that they have lost their freshness. Tempting, therefore, as they are, they should be avoided by the girl of moderate means. Much better and more enduring effects may be attained by the use of drawn or embroidered linen covers, which are made to fit the tables. A fine bird's-eye makes a pretty cover, trimmed with a narrow, fluted ruffle of white cambric or linen lace. A fine white linen, embroidered with the owner's monogram, and trimmed with white lace, or finished with a hem-stitch or scallop, always suggests the careful and fastidious housekeeper. Dutch, Hungarian, and German embroideries are good. Dotted muslin covers trimmed with wash lace are very dainty for tables and bureaus. An enamelled bed trimmed with dotted muslin and lace to match in a room with a flowered paper is very lovely. The valance and the spread are both made

WHAT CAN BE DONE IN SLEEPING-ROOMS

over a color, and the pillows sometimes having separate covers, also of the dotted muslin, and sometimes merely hidden under the cover. The bedspread, by-the-way, should be cut at the two lower corners, so as to be pulled straight around the posts.

A Corner Dressing-Table

A very pretty dressing-table for the corner of a girl's room is illustrated in Fig. 3. As shown in Fig. 4, it is built

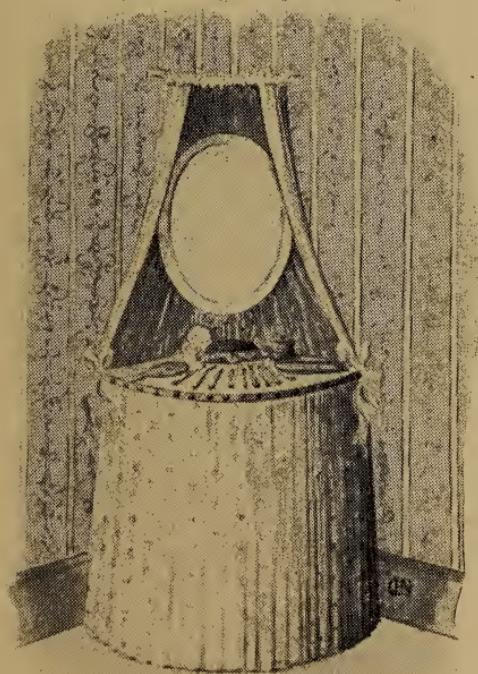


Fig. 3

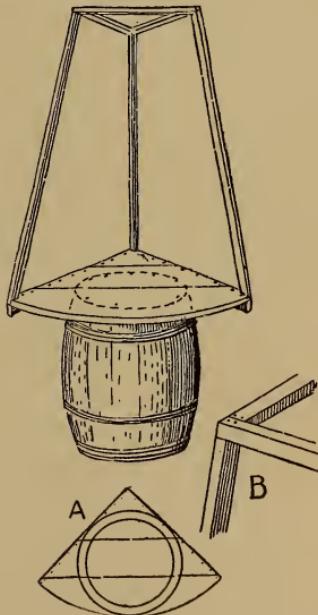


Fig. 4

up on a sugar barrel, which is thirty inches high and twenty-four inches across at the widest place. When it is inverted, screws or nails can be driven through the bottom to hold the triangular ledge or table-top in place.

Three boards should be cut to form a quarter of a circle thirty inches long on the two straight sides, as shown in Fig. 4 A. The sweep, or curved edge, is one-quarter of a five-foot circle. Fig. 4 A also shows how this quarter-circle is placed on the top of the barrel.

To keep the boards together, two battens thirty inches long are nailed or screwed underneath the straight edges.

Screws rather than nails should be used in fastening the quarter-circle to the barrel. They will not pull out or work loose so readily as nails.

The canopy top is supported on a framework consisting of three sticks, each three feet long, and a triangular top made of three short sticks, as Fig. 4 shows. At the top the sticks are joined as shown in B, and the lower ends are attached to the table-top with long, slim, steel-wire nails.

If the color scheme of the room is pink, pale-green, or canary color, this same color may be carried out in the drapery. Sateen or colored cotton goods may be overlaid with a dotted swiss or scrim, and tacked to the framework. At the bottom a valance is made and caught to the circular edge of the ledge, which is covered with gimp held by brass-headed tacks.

The upper sticks of the frame are bound with strips of white muslin before the drapery is attached. This is to prevent the wood from showing through the goods, and also to make an anchorage in which some stitches can

WHAT CAN BE DONE IN SLEEPING-ROOMS

be taken, if necessary, to hold the canopy drapery in place.

For this top it will be necessary to have two swiss or thin scrim coverings, between which one thickness of the colored material is laid. Both sides of the drapery will be seen, and it is necessary to show the colored goods on both sides.

A shirred band of the goods may be arranged along the top stick of the canopy, and bows at the corners of the top and the edge will add to its appearance.

An oval or square mirror in a white or light enamelled frame can be suspended by wires from the top.

Chapter II

THE POSSIBILITIES OF WINDOWS

IT is only in the apartments of the exceptional few that windows must be arranged with reference to a good outlook. Unless you live on a square or a park or overlook the river, you are not apt to have a pleasing expanse to consider, nor need you study carefully the interior of your room as part of a general line of construction leading up to a particular view outside, as when a wide window, for instance, opens directly on to a grove of oak-trees. Perfect freedom of access to windows does not have to be so carefully considered in your arrangement of things. Your windows for the most part, in fact, serve only a utilitarian purpose, that of admitting light and air. They are, with their hangings, really part of the general framing of the room, as it were, as the walls and the doors are—one more panel in your wall surface to be decorated according to given rules. The particular problem confronting the house-keeper, then, is a question of tones and lights, of agreeable shades not only harmonizing with the colors of the room, and making the interior in which you are temporarily housed, with its surrounding windows and doors, one composite whole, every part blending and balancing with the other,

THE POSSIBILITIES OF WINDOWS

but producing as well a restful impression upon you when you look directly toward the light.

Take, for example, the arrangement of some windows in a city apartment. These windows, being on the tenth floor, give a view of a mile or more of chimneys and ugly roofs, with a stretch of northwest sky beyond. After much study an uncomfortable problem has been met in this way: The



Fig. 1

window-sills outside have been filled with rows of evergreens in pots, so that if you are standing in the room you see nothing of the ugly foreground below, with its rows and rows of chimneys. Curtains of a soft tone are hung from the top of the window over the glass of the upper sash, and are then made by their gathers to fall in a straight line across the window, a half-yard or more above the evergreens. In this way any one sitting in the room, on looking up, sees only a foreground of greens against the blue of a northwest sky, the straight line of the soft curtain forming part of the frame to a lovely picture (Fig. 1). The tact of the hostess has thus been proved by her success in making her windows agreeable, both to those who stand and to those who sit in her drawing-room.

Window-Curtains

Again, to those who love the sky and who want it in their rooms, and yet who must shut out the eye of the passer-by below, the arrangement of the curtains becomes a serious question. Not only their texture and their colors, but the lines in which they are made to fall, become questions of importance. Thus in many New York windows you will see the thin, soft, ruffled curtains crossed and looped back just below the top of the lower sash. This gives the inmate an opportunity to look out in the street, while still protecting the eye from the unpleasant reflections of opposite houses. When, however, in an apartment on an upper floor, a glimpse of the sky, instead of an opposite wall, is possible, these curtains should be looped higher up—in an

THE POSSIBILITIES OF WINDOWS

angle made by the upper frame, in fact. The lower part of the window can then be filled with plants, but the sky in all its beauty may be freely shown.

The look of a window to the passer-by should never be neglected, and unless you study the question from the outside as well as from the inside of your room you are not apt to make your windows a success. Windows have often been likened to the eyes of a house, but they are something more than that. It is easy, after a little, to know just what kind of a face is behind them, whether it belongs to a dainty personage, or to one who has only hung up a curtain in order that she may do what she chooses behind it—peep out at you unobserved if she wants, or be untidy without betraying herself! A sheer soft silk or a silkolene will give you perfect protection from the passer-by, serving you as well as any lace curtain falling straight. It has many advantages. You can dress your window with thin curtains to look well from the outside, draping them prettily, tying them with a ribbon, looping them high or low, getting just the lines you want, so that a pleasing impression is made upon the outsider below. Between these thin curtains and the room a soft, transparent silk or silkolene not only gives you privacy, but does so gracefully, as it were, without putting the affront of too obvious a protection between you and the passer-by. It allows the light to come through and you to look out, and it adds to your room certain tones impossible without it. The color chosen must depend upon those in the room. Red is always a little thetic, rose tones are becoming, and the yellows cheerful in all weathers. But the material used must be

HANDY-BOOK FOR GIRLS

sheer and soft, so that the curtain does not present the impression of a flat surface between you and the light, but permits the outline and quality of the thin muslin curtain to be visible, the thin curtain remaining what it was originally designed to be, part of the general line of construction. This fashion is strongly recommended to those who want a view of the sky, as well as soft and agreeable lights, and who are afflicted by the windows of their opposite neighbors. Sash-curtains which cover only the lower part of a window are never seen to-day, happily enough, since few things are so ugly; but this arrangement of soft silk over a muslin or lace curtain gives quite as much protection without afflicting the eye (Fig. 2).

The cost of the silk must vary with the quality, but silkolene, when good in tone, answers every purpose. A yellow silkolene costing only ten cents a yard was used in a corner window with the summer and autumn sun burning into it, and the owner hardly knew whether it had faded or not at the end of several months, so perfectly had it lasted.

White muslin curtains are never agreeable in strong sunlight unless softened by one of these thin over-curtains, but the market is full of cream tones, yellows, and soft shades. When one does not want the silk curtains, therefore, good effects may be attained without them. China silks are most satisfactory, and can be washed with impunity. In windows with leaded panes, or in those filled with plants, or where a question of breaking up of sharp lines is alone considered, these China silk curtains of white, green, yellow, or pink can be hung with a deep valance

THE POSSIBILITIES OF WINDOWS



Fig. 2

running across the top of the window, and two straight pieces falling from underneath, one on either side. One gets a good outline in this way, and, with one fern or small rubber-tree in a brass pot set on the sill, one is able to get perfect privacy until the lamps are lit at night.

A "Bull's-Eye" Window

There is nothing like soft yellow in a window. It always suggests sunlight even on the gloomiest day. A celebrated wit making a tour of a lady's apartment and coming upon a bath-room in which there was a window with yellow panes, said: "I see you bathe in sunshine!" In dark bedrooms, therefore, or in those opening on shafts, or in windows only a few feet away from an opposite wall, yellow is strongly urged. When this cannot be done with drapery,



Fig. 3

THE POSSIBILITIES OF WINDOWS

or when windows with leaded panes of yellow glass are not possible, resort may be had to varnish, mixed with a little raw sienna or the Venetian pink which gives a yellow. A window coming against a house some twelve feet away, when so treated gave perfect privacy to the occupant of the room, besides adding an agreeable light. Even at night the window was opaque. Another window, shown in Fig. 3, has been treated along these lines, but with more elaboration of design. The lower half has been painted in bull's-eyes, while the lower panes of the upper sash have a row of flowers. The coat of arms of one branch of the family has been painted in. The window has been shown here without drapery, in order that the best light might fall on it.

The cost of materials for treating windows with plain bull's-eyes is small, amounting to seventy-six cents. These include one tube of Italian pink, one of black paint, a paint-brush, a bottle of turpentine, and a bottle of varnish. The black oil paint may be mixed with a little shellac, varnish, or Japan dryer, for the leading, which should show lines about one-eighth to one-quarter of an inch in width. Cloud in between with varnish, mixed with a little sienna or pink. The effect of these windows is altogether delightful, every opportunity for ingenuity being seized. Sometimes the flowers painted are delicate in tone, and again they are large and decorative in character.

Chapter III

WINDOW GARDENS

A WINDOW containing a collection of healthy and blooming plants stamps the owner as one possessing refined tastes and a kind disposition, together with a love for all that is beautiful in nature. Window-boxes ornamented with English or American tiles, and lined inside with zinc, are too costly for the size of young people's pockets. Besides, there does not begin to be as much fun in a "store" window-box as is contained in one made at home with the assistance of father or big brother.

A well-made window-box for the cultivation of plants during the winter and summer months will last a number of years with ordinary care.

Fig. 1 represents a home-made window-box when completed. The box consists of well-seasoned one-inch white pine thoroughly nailed together. At one end of the box (A) a hole is bored to allow all surplus water to drain off and into the pan, also shown at A. To prevent the water and moisture contained in the soil from rotting and warping the woodwork, several coats of hot asphalt are applied with an old paint-brush (asphalt varnish will also answer), thus closing up all possible leaks, and thoroughly protect-

WINDOW GARDENS

ing the woodwork. There is no rule for the proportion of window-boxes; the requirements of the plants used and the widths of windows and sills govern the proportion of the boxes. If the windows intended for boxes are very wide, braces of wood should be fastened across the tops and bottoms of the boxes to strengthen them, and extra feet nailed on to support them.

All boxes, as well as flower-pots, containing growing plants should have a thorough "bottom drainage." This is accomplished by placing on the bottom of the box a layer of broken earthenware or old bones broken into small pieces. The bones answer a double purpose—that of drainage and a supply of plant-food.

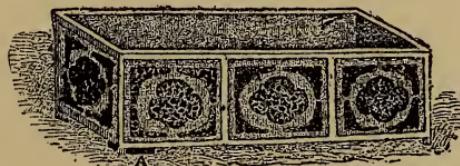


Fig. 1

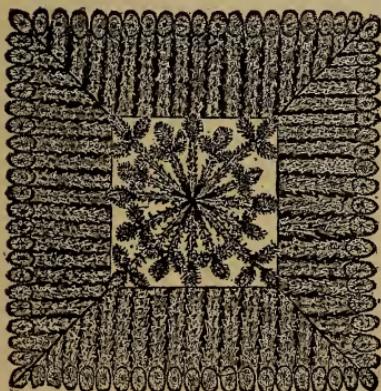


Fig. 2

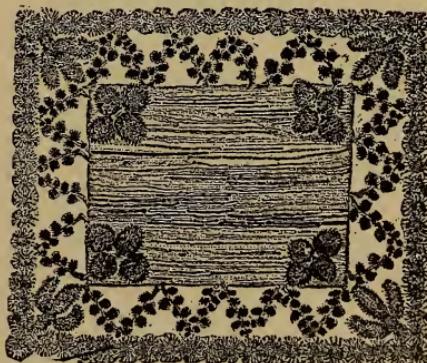


Fig. 3

Some Panel Designs

Fig. 2 is a spruce-wood panel. A square is first drawn on the outside of the window-box; this square is painted a light green, to contrast with the brown of the spruce twigs. After the paint has dried, the guide-lines are ruled from corner to corner through the centre. Small twigs of dried spruce-wood of a uniform thickness (about that of a lead-pencil) are selected. If the leaves do not fall off readily, the twigs are placed in an oven and thoroughly dried, so that they fall off at the slightest touch. The twigs are bevelled at the ends, as shown in the picture. In the centre of the panel is nailed a square of wood equal in thickness to the spruce-wood twigs. This square is painted white, and is also ornamented with spruce twigs and the small cones of the spruce, the intention being to produce an elevated centre to the panel. The spruce twigs are firmly fastened with small brads. Over all two or three coats of furniture varnish are applied to develop the rich colors of the spruce-wood, as well as to protect it from outside moisture.

Fig. 3 is a cone panel. The outer border is composed of the burrs of the liquid-amber tree ("alligator-wood"), with corners of pine cones. The next line consists of a band of spruce branches with the cones attached. The centre is a sheet of white-birch bark, with hemlock cone corners. The ground consists of two coats of paint of a cream-white tint. The cones are fastened on with small brads or pins that have been shortened to a convenient length.

Fig. 4 is a tasteful grape-vine panel. The canes are first

WINDOW GARDENS

softened in boiling water or steam to make them pliable for bending into curves. The shorter curved branches consist of short sections neatly joined to the leading curves. The centre is composed of a framework of liquid-amber



Fig. 4

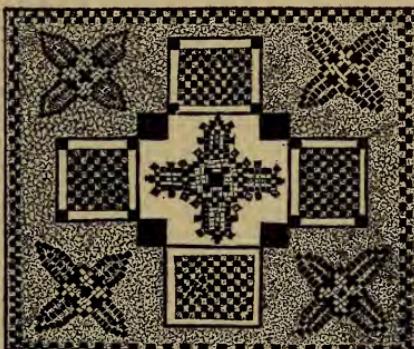


Fig. 5

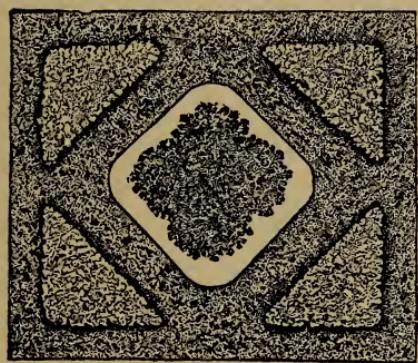


Fig. 6



Fig. 7

wood, with grape-vine monogram or other device. The grain of the white pine when brought out with the varnish answers for a groundwork.

Fig. 5 is a panel covered with marbled oil-cloth (such as

HANDY-BOOK FOR GIRLS

is used for covering tables and desks) of a light tint. It is first cut exactly the size of the panel, on which it is glued, the edges being secured by nailing on to them narrow strips of floor oil-cloth of a checkered or vine pattern. The corner-pieces and centre consist of simple and neat patterns in oil-cloth, but rich in contrasts of colors. Brilliant oil-colors can be used for borderings and framing in lines; intense blacks, reds, and whites are best. Over all, a coat of varnish is applied. In Fig. 6 the materials consist of "clinkers," or slag, from furnaces, stoves, glass-house furnaces, and iron-foundries. These are fastened to the woodwork of the box by means of hot asphalt.

The corner-pieces in the illustration are composed of clinkers of a light color. The central group consists of vitrified clinkers from an iron-foundry or glass-house. The handsomest clinkers are to be obtained from glass-houses, as they are composed of more or less glass of different colors.

After the groups of clinkers are firmly fastened in position, a coating consisting of varnish mixed with any of the chrome greens is applied to all parts of the exposed woodwork. The clinkers look much more brilliant when touched up here and there with gold or copper bronze. This is accomplished by applying varnish to the clinkers; then, before it dries, dust on the bronze-powder with a dabber of cotton or wool.

Fig. 7 consists of cross-sections of various kinds of woods, which are well seasoned previous to being glued together.

Straight branches of red cedar, black walnut, red birch,

WINDOW GARDENS

etc., are selected; these are cut into uniform lengths, and tightly bound together with strong cord or wire, after which a sufficient quantity of *very* hot glue is poured on one end of the bundle to fill up all the spaces and join the branches together. After the glue has become dry and hard, the bundle is sawed into cross-sections of one-half inch thickness.

These cross-sections are smoothed down with emery-paper and sawed into strips, which are glued on to the window-box when forming the panel. The centre of the panel is composed of various kinds of woods, polished to bring out the grain, after which they are inlaid, the spaces between being filled in with glue. Over all, several coats of varnish are applied.

Plaster-of-Paris Panels

A handsome panel may be made of plaster of Paris. On a sheet of wrapping-paper, exactly the size of the panel, draw the design to be worked in plaster.

In mixing the plaster a solution of glue and water is used; the glue is for the purpose of delaying the setting of the plaster, in order to gain time to trim up the plaster when necessary. To the glue and water is added the coloring material. A small quantity of plaster is mixed with the glue water at a time, to the consistency of a thick paste. The plaster is urged from the point of the spoon with which it is applied with a pointed stick that has been thoroughly oiled to prevent the plaster from adhering to it. Some practice is required to guide the plaster so as to

keep it within the outlines of the drawing. Another way is to make a coil or cornucopia of stout, well-glazed, and thoroughly greased writing-paper, made small at the point. A quantity of the plaster is placed in the coil, and by gently squeezing the top of the horn a continuous stream is forced out; this may, by moving the horn in straight or curved lines, be made to fill in any pattern drawn. After the plaster patterns have thoroughly dried, they are glued in position on the window-box and well varnished.

The Flowers

Having made our boxes, it is now necessary to fill them, and not the least delightful part of this garden on a small scale is, with the money in hand, to pore over a florist's catalogue, and get quite wild with all the gorgeousness promised for that small bill or large piece of silver. Hyacinths, tulips, crocuses, narcissus, snowdrops, lilies, freesias, etc., with all their varieties and colors, are so easy to raise, and so lovely about blooming. What a wild confusion they do raise in one's mind as to which to choose when it is not possible to get them all! But beware of getting *really* wild, and expecting too much of the box garden.

Tulips are the cheapest, as some of them are not more than five cents apiece, and less by the dozen. They make a great show, too, with their rich colors, and a way they have of displaying all they are. Beds of them out-of-doors are very ornamental; but if one has only a tiny indoor garden—well, they do not perfume the house.

Crocuses have no odor either; but a dozen of these little

WINDOW GARDENS

bulbs can be bought for ten cents, and may be scattered among the larger ones, where they will peep forth in the daintiest robes of white and gold and lilac and pink, like the first smiles of spring. It is quite settled, then, that crocuses are among the "must-haves."

The very best way of spending your money, after the crocuses are secured, is to lay it all out on hyacinths. They are deliciously fragrant, have many beautiful colors and shades of color, and they can always be depended upon. Some one has compared the hyacinth among winter bulbs to the rose among other flowers; for no garden is complete without roses, while some lovely ones are *all* roses. So our garden in a box shall be all hyacinths.

The little Roman hyacinth, with small clusters of single flowers, is pretty and cheap—four bulbs, promising red, white, blue, and yellow blossoms, can be had for forty cents. This dainty hyacinth has several flower stalks, which give it a more graceful appearance than its fine but rather stiff cousin, with her one great pyramid of bloom. Three Roman hyacinth bulbs can be planted in one pot that measures five inches across the top, and here they will live peaceably together, and attend each to her own individual affairs of sprouting and blooming.

Whether stiff or not, the lovely column-shaped mass of flowers which the statelier hyacinth sends up from its calyx of narrow, thick leaves is always a delight, both for beauty and for fragrance, and half a dozen such plants will make a garden of themselves. They are both double and single, and it is often hard to tell which is the prettier. Those that have particular names, and appear in the cata-

logues as "Lord Wellington and Madame de Staël, beautiful blush shades; Countess of Salisbury, lovely clear blue; Czar Nicholas, delicate pink; La Candeur, a beautiful pure white; Jenny Lind, bright red," etc., cost from twenty to seventy-five cents apiece. But unnamed ones, and very pretty ones, too, can be bought at ten and fifteen cents. With three of the half-dozen at ten cents, and the other three at fifteen, our hyacinths will cost just seventy-five cents.

This leaves twenty-five cents from a dollar for crocuses and freesias, the latter being tiny bulbs with leaves like grass. The trumpet-shaped flowers are cream-color, and grow in a row on the stem, which is bent where the first blossom begins. But what a wealth of sweetness these little flowers send forth! We cannot do without them if there is a dollar to spend—and if there isn't, we'll give up some of the others. Three freesias can be had for fifteen cents.

The Planting

Now that we have made our selection and bought the bulbs, what is to be done next? The first thing is to decide when we prefer to have our flowers. Eleven or twelve weeks should be allowed from the time of planting them; and for the middle of February, the bulbs should be planted by December 1st.

For when they are planted the bulbs must be left to take a nap of five or six weeks in some cool, dark place, where they can get ready for all the work they have to do later. But be sure that there are no mice about, for these little nibbling wretches are very fond of hyacinths,

WINDOW GARDENS

in the same way that the cannibal loves his fellow-creatures. They may be planted in earth or in moss or in water; but earth of the right kind—three-quarters of light, rich loam to one-quarter of sand—is less troublesome and better for the bulbs. Water must have charcoal at the bottom to keep it pure, and it needs changing every two weeks, while the moss must be kept constantly wet. One or two waterings during their period of retirement, to keep the soil from getting hard and caked, will be sufficient for the earth-planted bulbs.

By planting in pots, which are afterward arranged in a box for the window, the plants can be better attended to, and moved forward or a little out of sight when they come into bloom, according to height and beauty as well as harmonious coloring. Meanwhile they are not idle while they are lying there in the dark. They are growing, but it is down instead of up. The thread-like roots are getting firm and strong, and when there is enough of them to bear such a heavy topknot, a little green sprout appears, and it is time to bring them into the light and heat.

Chapter IV

PICTURES AND PHOTOGRAPHS

IF the subject of a color scheme for her room is a difficult question for a young girl to cope with, how much more difficult is, or should be, the proper selection of pictures, which, with books and carefully chosen bric-à-brac, should add the last definite note of individuality and beauty to the home! A poorly chosen picture, or a good one unwisely framed and hung, will cause more discord than an inharmonious color. Fortunate indeed is she who starts with nothing worse than bare walls, or a troublesome present or two from some friends who recognize the claims of art, but whose sense of appreciation is limited to color, likeness, and a handsome frame.

Etchings, Engravings, and Prints

Bare walls, however, although not as troublesome as objectionable pictures, are not at all satisfying, and home can never be home until they are filled. Oil-paintings are an utter impossibility for a person of moderate means. Etchings, engravings, and water-colors must be limited to a few; in fact, any good original work, although so much to

PICTURES AND PHOTOGRAPHS

be desired, costs in proportion to its desirability. Beautiful little water-colors by artists whose names are too obscure to influence the price may sometimes be found at reasonable rates. We may not have the "remarque" prints of either old or new engravings or etchings, but we may enjoy some of the later proofs, embellished with the publisher's name, quite as well, or even photographic reproductions of the originals. The art-stores have fascinating collections of old English prints—colored mezzotints, etchings, and chromo-lithographs—the last the product of from twenty to thirty stones wrought by the skilled hands of an artist. The prices are high, but not unreasonably so. There are prints of English hunting scenes, Dutch interiors, and, even more beautiful, of the paintings of the old masters in soft, rich colors. An American engraver has produced some fascinating mezzotints of Reynolds and Gainsborough beauties. The colors are soft and silvery, and the effect very satisfying when framed artistically in dull gold, with a narrow margin of the paper upon which the print was made. The note, "colored in one printing without retouching," combined with the name of the artist, adds great value to the prints, for the process is both difficult and very unusual.

All of these pictures we must buy one at a time and at long intervals. The walls of the new home must needs be desolate for a long time waiting for them. In the mean time the spaces can be made beautiful with photographs, that greatest blessing and curse of the nineteenth century. By means of them we can enjoy all the artistic treasures of both the Old and the New World—the paintings, the sculpt-

ure, the architecture, and the quaint foreign scenes so dear to our hearts. The imported Braun and Berlin carbons, and the Copley and platinum prints of our own country, are artistic treasures in themselves, aside from their value as reproductions. Soft and deep in tone and color, they never cease to give the deepest artistic satisfaction. Cheaper still are the silver prints, and not to be scorned are the photogravure reproductions brought out by so many art publishers in their magazines.

Unhackneyed Subjects

Our selection of subjects is almost unlimited, but it is in this selection that the danger lies. Without absolute confidence in one's own taste and knowledge, the safest and broadest field lies in the copies of the world's art treasures. Further and further study awakens an appreciation of one great master after another, until our walls show the best examples of them all. A danger to be avoided is the more or less hackneyed subjects which are to be seen on all sides. Who has not caught glimpses of Baby Stuart from the street and elevated trains until she is weary of the sight of it? Baby Stuart in gold, black, white, and brown! When a picture is to be found in the basement of a department store, touched up, it may be, in delicate tones of blue and pink, and with the inevitable elaborate gold frame, the subject has lost its attraction and may be tabooed, although oftentimes with an inward feeling of disloyalty toward an old friend. It adds distinction and individuality to a home if the pictures are felt to be an expression of per-

PICTURES AND PHOTOGRAPHS

sonality and of love, rather than of popular fancy. Alas! they always are an expression of personality, although an artistic sense which is sleeping or has had no opportunity for development must sometimes be translated as no artistic taste at all.

The Italian Masters

Instead of confining ourselves to the *Sistine Madonna*, beautiful though she is, to Correggio's *Holy Night*, or to Murillo's *Conception*, let us turn to some of the Raphael Madonnas less often seen, his exquisite *Madonna del Gran Duca*, in the Pitti, or one equally beautiful at Chantilly. The head of a Madonna full of sweetness and charm is taken from that of Filippo Lippi in the Uffizi. For a lover of the Florentine school the pure, tender faces of the Botticelli Madonnas, both in the National Gallery and in the Louvre, never lose their fascination. In the same room in the Louvre with the almost too popular *Mona Lisa* of Leonardo da Vinci is another by the same artist, his *Saint Anne*, full of his own peculiar fascination and charm.

The Flemish School

The religious subjects of the Italian schools are more widely known than those of the other schools, but they lack a certain quaintness and beauty which endear the efforts of the old Flemish masters to the heart of one who knows them. Exquisite in detail and color, the faces pure, sweet, ethereal, the figures graceful in their very awkwardness, the

HANDY-BOOK FOR GIRLS

old altar-pieces have a unique interest as well as beauty. Some of the most beautiful are those of the Van Eycks. The exquisite St. Bavo triptych was recently seen framed very effectively in a dull gold Gothic frame. The quaint Antwerp angels of Memling are beautiful in a dark frame of three divisions, as in Fig. 1. Holbein's *Meier Madonna*, at Dresden, full of dignity and tenderness, combines the quaintness of the older painters with the greater technical skill of the sixteenth century. His portraits are executed with the same exquisite touch and charm. Erasmus in the Louvre and Morette in Dresden have a certain resemblance to the interesting Dürer portraits, those of himself and Maximilian at Vienna, and one of a painter in Dresden.

Better known are the portraits of Rembrandt, Franz Hals, and Van Dyck. Those of Rembrandt's wife, Saskia, and of himself, masterpieces in light and shade, are very effective in broad, dark frames. Van Dyck's portrait of a *Lady and Her Daughter* in the Louvre has more real beauty and spirituality than most of his portraits of ultra-noble lords and ladies. The characteristic touch of Franz Hals shows in his *Jester* and *Jolly Man* at Amsterdam. We lose Rubens' glorious color in the photographs, but we have the beautiful eyes and mobile lips in *Le Chapeau de Paille* and *Helen Fourment and Her Children*. Sir Joshua Reynolds' *Duchess of Devonshire and Child* and Gainsborough's *Honorable Mrs. Graham* are both charming in photographs. These two painters, together with Lawrence and Romney, give us some fascinating children very appropriate for children's rooms. Quite different in style but very effec-

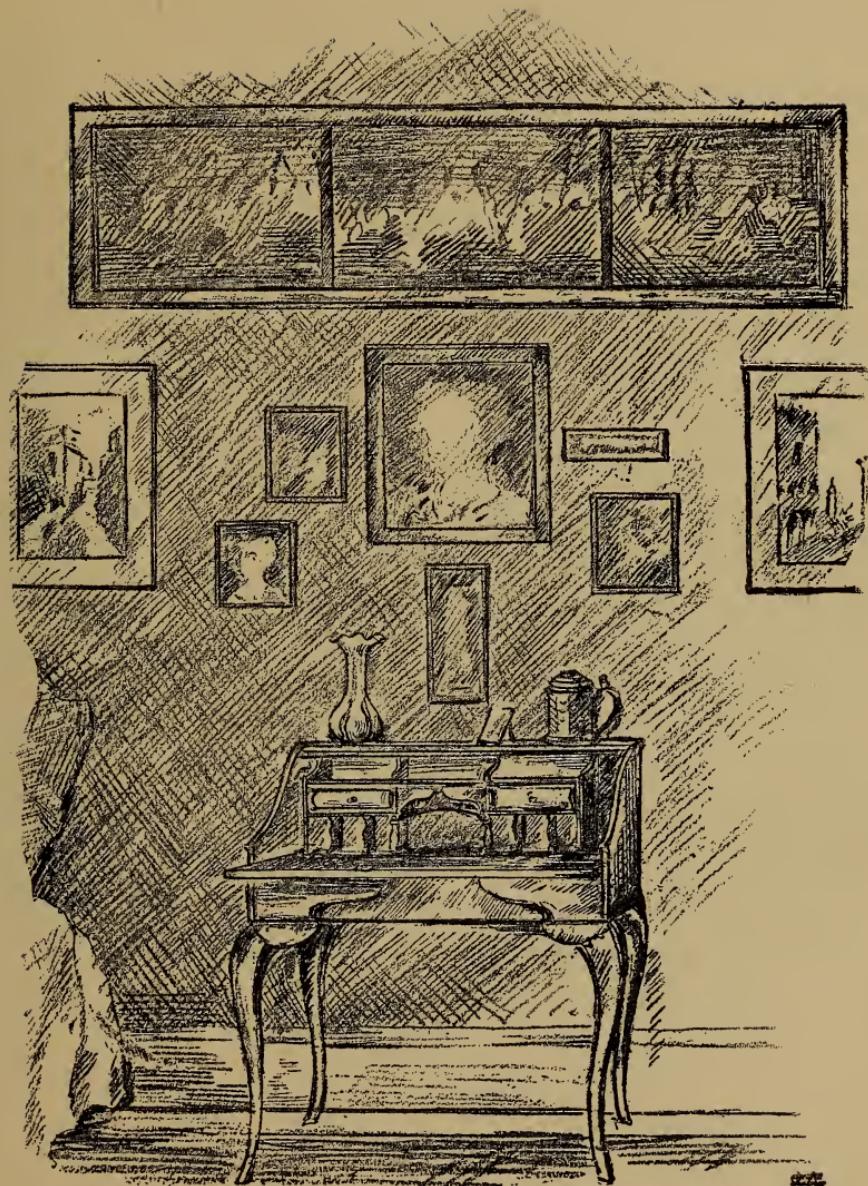


Fig. 1
ARRANGEMENT OF PICTURES

HANDY-BOOK FOR GIRLS

tive, are Watts' portraits and some of the Sargents, Whistlers, Alexanders, and Abbeys of to-day.

French and English Art

The portrait is always particularly appropriate for the library, hall, or dining-room, but for the drawing-room the photographs taken from some of the graceful landscapes of Corot, Daubigny, Diaz, or Dupré of the French school, or of Constable or Turner of the English school, seem more in place. *The Fighting Téméraire* is very beautiful in the rich tones of a photograph. The boys will be delighted with Meissonier's military scenes or with the *Surrender of Breda*, by Velasquez, the girls with Greuze heads, and all the younger children with the animals of Potter, Cuyp, Troyon, Von Marcke, Jacque, and Landseer.

Very few can resist the fascination of the most beautiful of Burne-Jones' fancies. Less known but more beautiful than the *Golden Stairs* are *Pan and Psyche*, *Wine of Circe*, *Studies for the Mask of Cupid*, and the series of charming figures, *Franchesse*, *Courtesy*, *Richesse*, and *Largesse*. Watts' paintings, although hard to understand, are full of beauty and mystery. *Love and Life* never ceases to charm.

Framing and Hanging

When the pictures have been selected the difficulties are not over. They must be framed and then hung. Framing especially requires the eye of an artist. For water-colors there must be a mat varying in width with the size of the

PICTURES AND PHOTOGRAPHS

picture. It may be gold with a gold frame, or, if the painting is dark, of the same tone as the strongest note of color, with an inconspicuous moulding a tone or two darker. White mats are still used when the painting is light, with a narrow gilt frame.

Colored prints vary their frames with their subjects, but usually have no mats. Old English hunting scenes with a preponderance of flaunting scarlet have narrow black frames, Japanese prints either black or brown bamboo with the brown prints. The prints of old Madonnas have dull gold frames, while engravings and etchings have a moulding toning in with the brown or black of the print.

Photographs are almost invariably framed close, the frames matching the darkest tone of the picture. The artistic framer stains his own frames the exact tone required. The moulding must be as simple as possible in design. The width is governed both by the size of the picture and by the detail in the picture. A landscape or scene containing many small figures will admit of a very narrow moulding, while a large head demands a broad one. No definite rule can be given. Landscapes are sometimes framed with a double glass to bring out the perspective. A carved Florentine frame, either round or oval, is very beautiful on a Botticelli or Filippo Lippi head.

In hanging, the guiding principle as to height is the level of the eye, but combined with that are equally important considerations of size, shape, and color, in relation both to wall-spaces and to each other. The inclination seems to be to hang pictures too high, giving an impression of being skied. Too high, too far apart, poorly balanced, and form-

HANDY-BOOK FOR GIRLS

ing steps or gables are pitfalls to be avoided. When one's pictures are large and can be hung one in a place, with a thought only for the proper height and lighting, the problem is a comparatively simple one. The eye must rest directly upon it; it must not give the impression of weighing heavily upon the piece of furniture beneath, nor must it float off into space above. The shapes must harmonize



Fig. 2

PICTURES AND PHOTOGRAPHS

with the shape of the piece of furniture beneath, as well as with the space. That the dark places must be lighted up with the light pictures and the dark photographs hang in the high-lights can easily be seen. The screw-eyes must be placed in the picture so that it will hang flat instead of tipping out.

In grouping small pictures the difficulties are many. A large picture, strong in detail, for the centre is the first necessity. The smaller pictures may be grouped around it (Fig. 2). A certain balance must be maintained, but geometrical lines must be avoided. Relative size, color, shape, and even subjects have to be considered. There must be variety and yet withal the balance must not be destroyed. Pictures are very obstinate at times, especially when one is confronted with the difficulties of a long, unbroken wall-space. They will and they will not fall into the proper harmony, and one never knows what is to happen until the attempt is made.

Photographic Possibilities

Abundant means do not always guarantee the best results in making a house artistic and homelike unless the mistress has refined tastes. It is sometimes quite as unfortunate to have an abundance of money as it is to be hampered by limitations in this line. In other words, the girl who has a full purse is not so apt to exercise her originality as her sister who is obliged to think twice before spending her dollar. And, too, there are so many artistic ideas that can be carried out to beautify the home and to

HANDY-BOOK FOR GIRLS

make it what it should be—the dearest spot on earth—if one only has the inclination and the taste to do so.

Take the matter of photographs, for instance. We are all tired of seeing them on the mantel and piano—they seem so wholly out of place. They are therefore tucked away in albums, out of sight. Nevertheless, in spite of their banishment, there is nothing quite so full of decorative possibilities as the right photograph in the right place.

A Blue-and-White Frieze

It is always a problem to know what to do with blue-prints, which are rather unsatisfactory possessions when pasted in an album. Yet kodak friends continue to present us with these pretty pictures, and fill album after album with such souvenirs.

A clever girl who has the blue-print craze thought of a scheme whereby they could be utilized to advantage in decorating her room. She therefore took pictures of her little sister and her baby brother in all sorts of cunning attitudes, such as only children can assume.

While travelling in the West she took blue-prints of the interesting places, as she did also in the South and in Europe. It was decided to make a blue room (Fig. 3).

The ceiling of this pretty room was decorated in old-ivory effect with plaster roses and bow-knots in a blue-and-white design. For the upper third of the side walls a delicate cream paper was used. A white enamelled picture-moulding was then placed just above a frieze of blue-prints, and a narrow blue moulding finished this panel. The lower



Fig. 3

part of the side wall was hung with old-blue book linen, the color of which gave character to the entire room. A blue velvet Axminster rug, blue-print pillows, and dainty scrim curtains gave the finishing touches.

The frieze of blue-prints, a portion of which is shown in the illustration, extends about the entire room. On one side are the children's pictures taken when they were little, and these are a never-ending source of pleasure to the girl who occupies the dainty apartment. On another side are the Western views, with the children on their burros and having a good time generally. The Southern prints form

HANDY-BOOK FOR GIRLS

the frieze for another side, and the European views make a beautiful fireplace which looks exactly like a tiled one (Fig. 4).

The place was first painted a delicate buff, then the blue-prints were pasted on in squares to look like tiling, and a fine line of deep blue paint was drawn around each one for a frame. This suggestion of a frame also makes the pictures stand out in bas-relief and accentuates the tile idea.

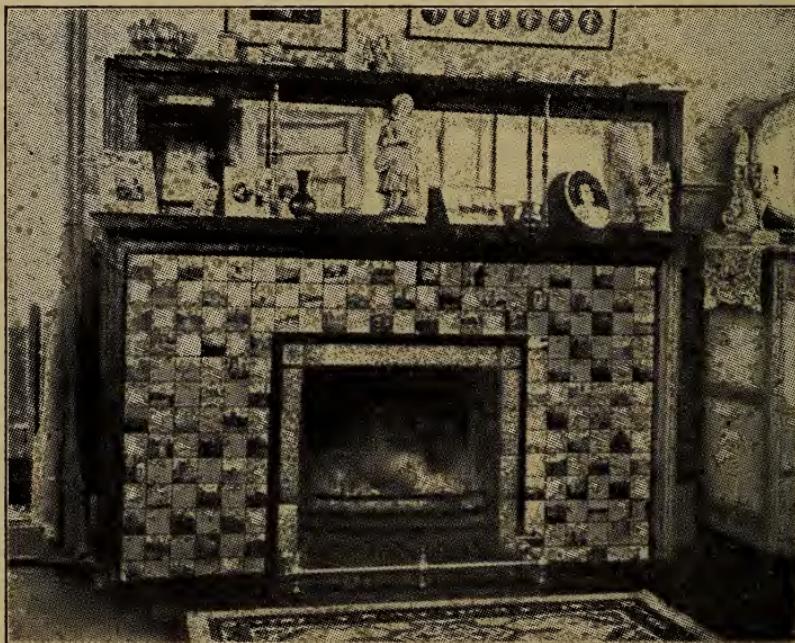


Fig. 4

To make the frieze, three rows of blue-prints were arranged around the room as follows: In order to insure evenness, the distances were carefully marked with chalk,

PICTURES AND PHOTOGRAPHS

which was afterward erased. Then the worker commenced in the corner with a blue-print, which was pasted securely in position with good library paste. A space the same width as the picture was left, and then another print was pasted on, and so on around the room.

For the second row of prints, instead of commencing in the corner, directly under the first print, that space was left bare, and the photo was pasted in the second space, underneath the wall spot above. The third time around the print came underneath the first one, with a space the depth of the picture between. This alternate space and blue-print gives a very pretty effect against the cream background.

Narrow blue ribbon was used as a frame crosswise and lengthwise, and a dainty fleur-de-lis brad was used at each corner for fastening. In order to insert the brad but once, two bolts of ribbon should be started at the same time, crosswise and lengthwise, inserting the brad at the proper place. The ribbon looks particularly dainty against the blue-print, and gives character to the arrangement.

A Musical Frieze

Another clever girl, whose exquisite taste exceeded her moderate means, was especially desirous of having an attractive music-room. Fifty dollars was the sum set apart for this purpose, and at first it seemed impossible to accomplish much with such limited capital. At length she thought of an effective decorative scheme with photographs, and proceeded to carry out her ideas (Fig. 5).



Fig. 5

The side walls of the room were hung with a pale-green satin-striped paper, and the upper part was kalsomined, on cartridge paper, a chocolate brown. Photographs of musical subjects were then pasted on this brown background, after

PICTURES AND PHOTOGRAPHS

which they were carefully tinted in sepia tones by the decorator to harmonize.

Plaster frames were then made around the pictures, and these were connected with flying ribbons and flower garlands, made of the plaster also, in relief-work. This decorative scheme was carried out in nearly as dark a shade as the background (Fig. 6).

The effect was more artistic and satisfactory than could be shown in a photograph, which loses much in values. Some idea can be obtained, however, from the two illustrations shown herewith, one of which gives a portion of the frieze over a doorway, and the other of a corner of the music-room.

The subjects chosen were the most popular musical ones



Fig. 6

—Burne-Jones' *Golden Stairs*, *Aurora*, *Psyche*, *The Choir Boys*, *Sonata and Elegy*, *A Lesson in Arcadia*, Reynolds' *Angels*, *Cupid's Minuet*, and many other favorites. These

HANDY-BOOK FOR GIRLS

were all oblong pictures, alternated with panel pictures of the Angelico angels with their drums, cymbals, and trumpets.

Nothing could be more attractive for a Japanese den than an arrangement of tinted photographs against a red cartridge-paper background. The blues, greens, and browns of the photographs are really exquisite against the plain red.

The Nursery

As the nursery is one of the most important rooms in the house, too much care cannot be expended on its arrangement. As the child's senses are first educated and his tastes are first cultivated in his nursery days, his surroundings should be considered of great importance.

The decoration of the walls should be given particular attention, and this is a good work for the older sister. Nothing is more attractive or educational for the purpose than photographs used as a frieze on a plain background, low enough for the children to see them.

The pictures should, of course, be selected with thought and care from the masters and the artists who have spent their lives in perfecting their ability to paint for little folks. Among these are the various Madonnas suitable for children, many animal subjects, and miscellaneous pictures that are pleasing to a child.

Chapter V

HOME-MADE FIRE-SCREENS

THERE is no prettier household ornament, nor is there any more serviceable article of household furniture, than a well-made fire-screen.

Screens of every variety are to be found in the shops, and at prices ranging from a few dollars for the simple designs, to many hundreds for others more elaborate.

Young folk who have leisure can as well make as purchase them, and often the results of home work compare most favorably with the best specimens of shop manufacture. The foundation framework is easily made by a boy who has any skill in carpentering, and the girls can have that part of the task done for them at a trifling expense. The most useful screen is made in three panels, each four feet and a half high by one and a half wide. The frames should be made of white pine, thoroughly seasoned, to avoid warping, mitred at the corners, and braced in the middle, as shown in Fig. 1. Strips of inch pine, two inches wide, will secure the proper lightness and strength.

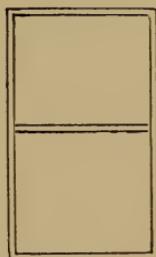


Fig. 1

The Frames

The frames are to be covered with brown sheeting or unbleached muslin, the coarser the better, which is to be stretched as tight as possible, and held by very small tacks driven in the edges, *not* on the faces of the frames. Having done this, carefully cut away all the surplus material; then prepare a sizing of thin flour paste, and with it wet thoroughly every portion of the muslin. In stretching, the cloth will pull unequally, and along the tacked edges there will be slight unevennesses, which can be smoothed down while wet, and which will be held in place as the paste dries. The drying takes but a little time, and when it is accomplished there will result a working surface as tight as a drum-head.

The Covering

In the paper covering individual taste may be exercised without limit, and the beautiful varieties of paper-hangings render it almost impossible to make a poor selection. The little ones are most interested in the nursery screen. Its bright colors and quaint figures are an unending delight to them, and many an hour is spent in studying their curious antics.

The background of this screen should be a very dark—almost black—cheap wall-paper of very indefinite pattern, slightly flecked with gilt. In cutting the paper for the front of a panel an inch and a half margin on all sides should be allowed, while the back piece is to be the exact size of the

HOME-MADE FIRE-SCREENS

frame. The paste should contain a little starch, be free from lumps, and not thick. It is to be applied as evenly as possible, and care is needed to see that every part of the paper is covered by it. Place the paper upon the frame, beginning at the top, and allowing the surplus inch margin to lap over. Put a piece of wrapping-paper under the hand, and slowly smooth the pasted part for about six inches down from the upper edge, thus pressing out all air bubbles and wrinkles. When this is successfully done, continue the same process, always smoothing downward.

Should any creases or other irregularities fail to disappear under the slow rubbing, take the paper by the two lower corners and lift it from the muslin until past the roughness, and then press again. In this way you are certain to remove the imperfection, and get a perfectly plain surface. The margin is next to be pasted, and will lap perhaps a quarter of an inch on the back. This will, however, be covered by the paper for the back of the panel, which is to be applied in the same way as the front piece.

The Decoration

The really hard part of the work is now over, and the most interesting stage at hand. Get from a book or toy store several illustrated books of nursery rhymes and children's stories. Cut out every figure in the book, large and small alike. Select three of the largest and handsomest for the centrepieces, and about these arrange the others as fancy suggests, without regarding the stories which they illustrate. The result will be charming, and daily admired.

HANDY-BOOK FOR GIRLS

The back may be ornamented in like manner or left plain. Four brass hinges fastening the frame together, a line of brass-headed nails all around the edges, both for the protection of the paper and as a finish, two small brass handles on the top of the outer panels to lift by and avoid soiling, will complete one of the prettiest decorations of the house.

The second attempt may be made with a background of cardinal-red felt paper, on which paste cuttings from old *Harper's Magazines*, one panel given up to flowers, one to birds, and one to animals.

Our last venture is the simplest of all in its manufacture, but is very effective. It is made of small-figured wall-paper, with a great deal of gilt in the design. On this are mounted three Japanese panels, such as are to be found on those hanging banners with which our Celestial friends love to deck their walls. All three are black, with sprays of flowers and birds painted upon them in the brightest colors, and the effect of the gold, the black, and the gorgeous reds and delicate blues in combination is lovely.

Of course there are as many methods and patterns in making screens as there are minds to design and hands to do the work. The plan suggested above is simple, and has proved successful.

Chapter VI

ART IN THE HOUSEHOLD

THE love of adornment, both of one's self and of the house, has led to many sins, not the least of which is the bric-à-brac habit. The instinct is inherent, from the love of the savage for his war-paint and feathers to that of the woman who indulges in "drapes" and Dresden shepherdesses in a vain effort to fulfil its demands. At its best, cultivated, restrained, and trained in the "tact of omission," it becomes a true appreciation of the beautiful, and makes our homes an expression of the best that is in us, both artistically and practically.

Bric-à-brac comes under even greater restrictions and more stringent artistic rules than furniture, simply because it belongs to that list of household furnishings which, if need be, we can do without to a large extent. Chairs and tables we must have, but the only excuse for existence which bric-à-brac may claim is that of true beauty or, preferably, usefulness combined with beauty.

Lamps and Shades

The arts and crafts movement is assisting materially in making the necessary articles beautiful—our lamps and

candlesticks, our clocks, our fire-irons, even the gas and electric-light fixtures formerly so much of an eyesore. Instead of the hand-painted porcelain bowls or the elaborate gilt and onyx standards of the lamps of a few years ago, and of to-day as well if we yield to the doubtful attractions of the department stores, we have bowls of hand-wrought copper and brass, and pottery in rich tones and glazes, either Japanese or some of the products of the American potter's art. Some of the more expensive lamps, although not excessively so, have a bowl of Damascus finely wrought brass with shades either of opalescent glass in harmonious tones (the ambers and greens are the most artistic), or of cut brass interlined with a color. Still more expensive, but extremely artistic, are those in green bronze. For a moderate price those of Benares brass or of Japanese or American pottery are the most practical (Fig. 1). Standards in dull green with an opaque green shade are very satisfactory. Others in the soft grays and blues of the Copenhagen ware, the equally soft greens and browns of the Bigot, or the combined greens and blues of the Japanese, are very artistic, especially when combined with the shades of opalescent glass, either plain or mosaic. The Japanese shades of bamboo and paper are extremely effective if they are good, but the blatant American edition of these shades is inexpressible in its ugliness.

The opalescent glass shades come either in the simple shaded glass, or in designs adapted from the forms and colors of nature. Those in mosaic also come in the richly blended flower tones. These flower forms and colors are also adapted to the small globes for electric lights and for



Fig. 1

gas. Some never-to-be-forgotten sconces of green bronze have small globes of deep burnt orange modelled upon the graceful lines of the tulip. The fleur-de-lis, with its rich purples and greens, makes a wonderfully beautiful motive for a mosaic shade.

Clocks and Vases

The old Willard clocks, the tall Colonial clocks of our grandfathers, the mahogany mantel clocks in simple, straight lines, and the modern clocks modelled upon these, all telling the time of day in a simple, straightforward way, are always beautiful because of their simplicity. Elaborate creations in gilt, bronze, and decorated porcelain, hardly expected to tell the truth, certainly not so that the passer-by may read it, are an example of the worst phase of the bric-à-brac fever.

The jardinière with its fern, palm, ivy, or flowering plant, doing far more to make a room beautiful than many pieces of useless bric-à-brac, must be subordinate in color to the green of the plant, and must harmonize with it. Dull-green pottery answers both of these requirements; so also do the misty light greens, the browns, and the combined blues, greens, and grays of Japan. Russia supplies us with some fascinating jars in copper and brass, and Flanders with some in repoussé. An oval Oriental jardinière in plain brass with small claw feet is charming for a fern or English ivy. Fern-dishes of Benares and Damascus brass, as well as those of Bigot, Copenhagen, and Grueby, are a great improvement upon those of the ordinary porcelain.

Vases offer the greatest possibilities for the rich colors and graceful lines of pottery, as well as the more delicate charms of glass. Few can enjoy the possession of a bit of old Sèvres or of rare pieces of Chinese porcelain or majolica (Fig. 2). Those are not for a moderate purse, and, unfortu-

ART IN THE HOUSEHOLD

nately, it was not until recently that anything that could be called truly artistic could be found to take their places. Now, although the mass of gold rococo, gayly painted scenes from Watteau, and naturalistic flower designs still remain



Fig. 2

to tempt the unwary, the tastes of the more artistic can be richly satisfied with the masterpieces in color and form of the potter's wheel. A rich brown jar of Bigot or Rookwood filled with a few branches of autumn leaves, a dull-green Grueby vase containing a mass of feathery goldenrod, a Japanese bowl in tender green filled with sprays of apple blossom—any one is enough in itself to give a room its one needed touch of character, color, and decoration. Jugs, jars, bowls, vases, the supply is unlimited. No room need

lack the bit of harmonious color demanded by its color scheme.

Pottery

Modern pottery is not all artistic, either Japanese or American. Both the Japanese and Chinese have caught the commercial American spirit, and are trying to supply the market with poorly made articles at cheap rates. The fact that it is Japanese is often enough to satisfy the buyer, and the importers have not been slow in comprehending this fact. The colors are crude, the shapes awkward, and the workmanship poor. The more artistic and original the shapes from which the copies are taken, the more misshapen and grotesque are the results. Oriental art and *l'art nouveau*, what horrors are enacted in these names! *L'art nouveau* is capable of extremes, grotesque and decidedly questionable as to their claims to beauty, but *l'art nouveau* in the hands of American commercialism would fail to recognize itself.

Exquisite glass vases are modelled upon graceful flower forms. Some beautiful pieces are blown into delicate silver traceries. Others have the silver inlaid. These pieces are apt to be quite expensive, because very few artists have made successful efforts in that direction. The plain green glass vases, and even many plain white ones, come in simple, graceful lines, perfectly adapted for holding flowers and showing the stems and foliage in an effect which cannot be equalled by any of the more elaborate opaque glasses (Fig. 3).

In the dining-room nothing is more beautiful for the

plate-rail and sideboard than pieces of old china in blue and white and green and white. Most interesting color effects can be obtained with friezes of this kind. Combined with collections of pewter porringer and tankards,



Fig. 3

brass coffee-jugs and pitchers, the effect is extremely decorative if care is taken in the selection of the background color.

Casts

Other inexpensive but effective pieces of purely decorative bric-à-brac are plaster casts. If well made, exact reproductions, they are very satisfactory in soft ivory tints. There is a great difference in them, and the cheap, poorly

HANDY-BOOK FOR GIRLS

made cast is worse than none. Casts of the Venus of Milo are seen in which she is looking to the right instead of the left, her arms replaced, and the graceful folds of her drapery entirely changed. Venus is always beautiful, and so is Niké, but there are innumerable other reproductions of the masterpieces in sculpture, both ancient and modern, which have not suffered at the hands of the cheaper workmen, and are therefore more interesting and individual.

Smaller articles, such as desk-fittings, match-receivers, card-trays, etc., are all receiving the attention of the craftsmen. There are beautiful designs in green bronze, suggested by the pine cone and needles, and the equally decorative foliage of other trees. Japanese brass and bronze are very adaptable for these small necessities, and often extremely artistic.

The days of silk-tissue scarfs, delicate hand-painted cushions, and gauze bags of milkweed down have, fortunately, passed away. The few lingering specimens left behind will soon come to a natural end, thanks to their want of durability, but the day of pyrography and amateur photography is at hand, and we are surrounded on all sides by specimens of these two ensnaring arts. Nothing can be said against either one, if the work is well and artistically done, although moderation and appropriateness in their use are as desirable here as elsewhere.

Nothing so completely ruins the effect of a few artistic pieces of bric-à-brac as a heterogeneous collection of unframed photographs, whether they are attempts at landscape effects or family portraits.

Old Brasses

The American brasses are both English and Dutch in design, but are known in general as Colonial. The old settlers put a very high valuation upon their brass pots and pans. Even the Indians wished to have their brass kettles buried with them. The Dutch kitchen of old Colonial days, with rows of shining kettles hung upon the swinging crane, and the innumerable pans arranged in a gleaming line above, must have been a fascinating sight.

Candlesticks

These homelier articles are hardly fitted to take their places in our libraries and drawing-rooms, but the candlesticks and fire-dogs of all shapes and sizes we cherish tenderly. The brass itself varies greatly in both quality and color, but is usually very good. The shapes are many, with the appropriate names given them largely by collectors of recent years, but possibly often by the settlers themselves. We have "the parlor," "the cottage," "the Greek urn," "the eight-sided," "the melon," and the favorite "Colonial," so named because it is often seen in pictures representing notable historical events of Revolutionary days. A marked characteristic of these candlesticks is the arrangement at the bottom for pushing up the candle as fast as it was used, so that the last precious bit of tallow, prepared with so much pains and labor, might not be wasted. In others the stick itself can be raised or lowered to accommodate the reader, a need which we can easily appreciate in consid-

eration of the necessary dimness of the light even at its best.

One interesting specimen has a hook attached to one side so that it may be hung on one of the slats in the back of the reader's chair, or upon a hook in the wall to accommodate the housewife in her duties. The bedroom candlesticks,

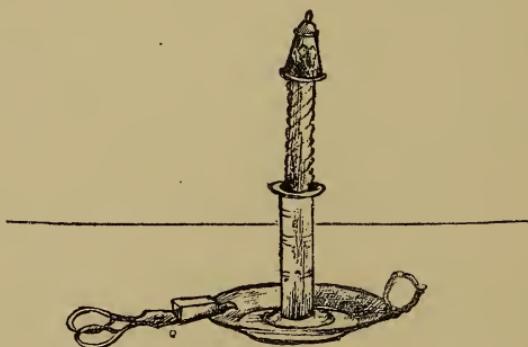


Fig. 4

supposedly pure Dutch, with the large saucer and low shaft, usually have a small knob in the stick to push up the candle, and are accompanied by snuffers and tray, often elaborately chased (Fig. 4). The small, conical extinguisher is sometimes, though not always, present. Many of those of the pure Dutch type have a long, flat handle instead of the small, round handle so often seen. A little later than the candlestick appeared the first sperm-oil lamps, some of them shaped very much like the bedroom candlesticks, but with a cylinder at the top for the oil, and two small tubes from which coarse wicks protrude. These lamps are very rare, as are the Betty lamps, shallow receptacles shaped very much like the antique Roman lamps, two or three

inches in diameter, and an inch in depth, either rectangular, triangular, or oval in shape. These were supplied with a chain or hook, so that they too could be hung on the back of a chair or on the wall. The wick hung from the nose. The Phoebe lamps were similar, but often with two noses. These are very quaint, but very difficult to find.

Fenders and Fire-Sets

The brass fire-dogs used in the "best room" (those in the kitchen were generally of iron) were the pride and delight of the housewife. There were often two pairs in the same fireplace, one tall pair in front and the other lower pair in the rear, called "the creepers." The best-known design was

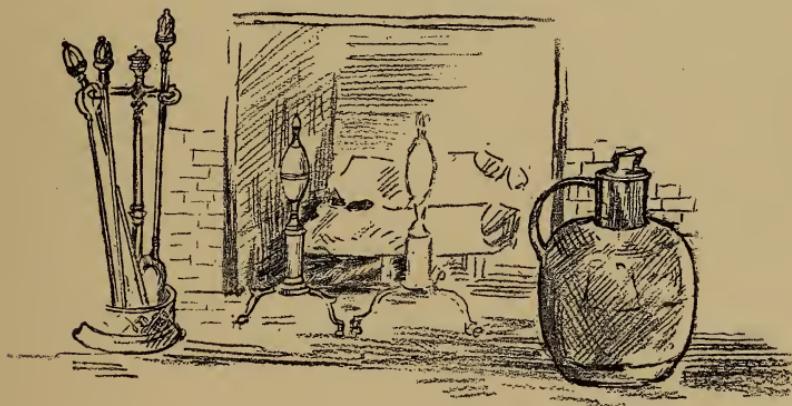


Fig. 5

the large ball, one variety of which is known as the New Hampshire. The Queen Anne is shaped like a double acorn (Fig. 5). The "steeple" pattern explains itself, and so

does the "urn." The simplest pattern is that which is turned from the base up, increasing in circumference at the top until it resembles the globe design.

With the andirons come the fire-sets—shovel, poker, and tongs, sometimes a brush—repeating the design of the andirons. The holders of the fire-sets and the fenders are either of a solid piece of sheet brass cut in beautiful floral or geometrical designs, and often standing quite high, or of turned pieces surmounted by knobs, also corresponding in design with the andirons. Stands for fire-sets are seen in which the different pieces are hung on hooks attached to the circular arms of the stand.

Warming-Pans and Chafing-Dishes

Among the interesting pieces which used to add to the shining array of disks about the kitchen fire are the warming-pans with their long wooden handles and gleaming brass covers. These were filled with hot coals and rubbed quickly between the sheets on a cold night. Chafing-dishes of brass were used to keep food hot upon the table just as to-day. There are fascinating old cut-brass lanterns and foot-warmers, and the daughter of a sea-captain cherishes a large brass speaking-trumpet beautifully chased. A brass eagle taken from the tall cap of an officer in the War of 1812 is another heirloom.

Knockers and Latches

Brass knockers and latches are often very elaborate and very beautiful. All the ornament of the old Colonial houses

was concentrated on and around the doors. The doorways were often beautifully carved, and the lines extremely graceful or severely classical in motive. The gleaming brass knocker was the crowning touch. The knockers in the shape of a ring are supposed to have been used originally simply to draw the door to. One unique and extremely beautiful design consists of a spread eagle on the knocker itself, falling upon an exquisitely wrought acanthus leaf.

Dutch Brasses

The traveller in Holland is surrounded by the gleaming of brass, its lustre always at its height through the tireless efforts of the Dutch housewife. The dog-cart with its burden of shining milk-cans is to be seen on all sides. The peasant woman seated beneath her white umbrella in the market-place has her shining coffee or tea pot by her side. Kettles, tea-jugs, tankards, coffee-pots, chafing-dishes, and candlesticks, sometimes elaborately chased, are hand-wrought and often modelled after those seen in the paintings of Van Eyck and Memling. The distinguishing Dutch shape is "dumpy" (Fig. 6).

Russian Brasses

Russian brasses are possibly the heaviest and finest in quality and color. One may find them in the queer little Russian shops in the lower part of New York and Boston. The growing interest in brasses has encouraged their importation, and if one has patience to barter, many artistic

treasures may be obtained at very reasonable prices. The most characteristic piece is the samovar (Fig. 7). These are treasured very highly by those who are fortunate enough to possess them. They are found in innumerable shapes and sizes, a witness to the tea-drinking habits of the Russians. Every Russian peasant who is prosperous enough

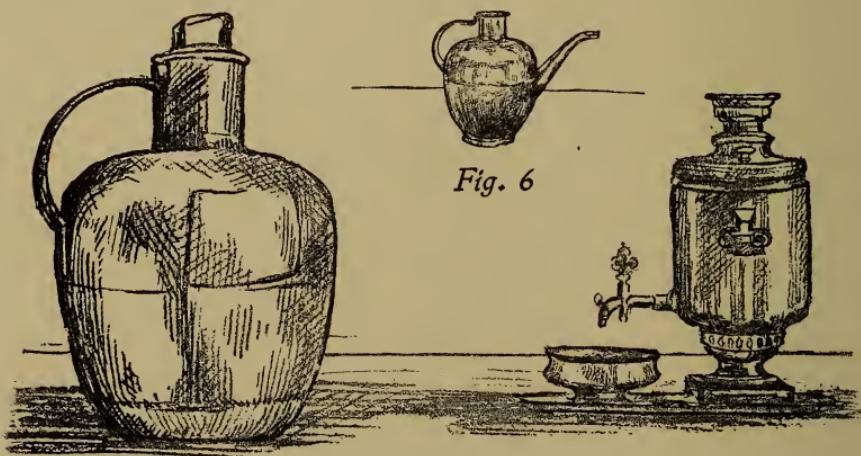


Fig. 6

Fig. 7

to enjoy the luxury of tea has his samovar. At all inns each visitor is supplied with one. They invariably accompany the traveller and the picnicker, and even the officers starting out upon a campaign find room for a small one in their baggage. Samovar signifies "self-boiler." It is made of brass, lined with tin, and with a tube in the centre in which the hot cinders of charcoal are placed after having been ignited. Often a pipe connects it with the chimney, and two friends will sit for hours drinking the boiling-hot weak tea.

ART IN THE HOUSEHOLD

The Russian candlesticks are very beautiful and of different shapes. Two characteristics are their weight (they are of solid brass) and the construction. A screw of solid brass unites the shaft and the base, so that the two can be separated, thus facilitating cleaning. We have them in all sizes from the tiny sealing-wax sticks to the beautiful church candelabra and single sticks four or more feet high.

Other pieces peculiar to the Russians are the cups called "bratini," from "brat" (brother), or, as we know them, loving-cups, having two handles; the bowls or ladles termed "koosh," and the small cups with one flat handle for strong liquors. Tall beakers and pitchers expand at the lip and slope gracefully down, to expand again at the base. Wine-jugs have the characteristic bulbous base, the form seen in the cupolas of churches, the tall, slender nose, and the graceful handle. This same bulbous form is seen in jardinières perched upon slender claw feet, in tankards, chalices, and bowls. These forms are found in pure brass, sometimes elaborately chased and in repoussé, on the rich man's table, but the prosperous or even poor peasant has the same shapes in red copper with bands, bindings, and handles of brass. Those supposed to be two or even three hundred years old are extremely heavy, and were used for both cooking and serving. Their graceful lines and rich copper tints endear them to us, no matter how humble their origin.

Damascus Work

The southern countries have all felt the influence of the Damascus art-workers. It is in and around Damascus that

HANDY-BOOK FOR GIRLS

the collectors will find the richest store of both old and new brasses. The business still thrives. Hundreds of trays, aiguières, and various other articles are sent all over Europe and to this country. These brasses are beaten, hammered, cut in low and high relief, and cut through. The characteristic Damascus brass is heavy and dark in color. The figures are cut in low relief, and the lines filled up either with a species of black enamel called "niello" or with other metal, either silver or gold. The process is called damascening. It was a favorite method of decorating metals during the Middle Ages throughout Persia, Syria, and some European countries. The designs are very fine, either Arabian leaf forms, mythological figures, or inscriptions. The name of the owner and the date were often engraved, thus adding greatly to the value of the old pieces. The Benares ware is of the yellow brass and hammered into more flowing designs than the Damascus ware, although a little cruder. The chief difference between old and new articles is that the former are made of thicker brass, and the patterns quainter and more carefully executed. Many of these brasses are enamelled in brilliant colors. That which we find in this country is known as the Moradabad ware and cloisonné. The older enamels were much softer and richer in color than those used now. Certain colors have entirely disappeared. Large platters from Damascus have wrought upon them Old Testament scriptural subjects—the story of Adam and Eve and the transmigration of souls. These must be the work of the Jews. Oval platters, round and oval trays and plaques, are often found. Often the trays are mounted on small feet and decorated with archaic fig-

ART IN THE HOUSEHOLD

ures of silver hammered into the brass. The old enamelled ones are supposed to have originally come from Constantinople. These are very rare. There are square trays with perforated edges and conventionalized designs or figures of Arabs on horseback, supposed to come from Tunis. The trays called Algerine are always beaten out on thin brass, but their color is peculiarly golden. Persian trays are covered with numerous small figures, often representing a whole drama.

There is a countless variety of Damascus lamps, mostly all perforated, all equally graceful and fascinating. There is the thistle shape, peculiarly Arabian; the beehive, made especially by the Jews; the flat, expanding lamp; and the Arabian country lamp which alone is tall and rather awkward. This last is intended to stand on the floor in the midst of a group of story-telling Arabs. Many of the hanging-lamps give the dim religious light appropriate to the synagogue, for which they were originally intended.

Part II

ARTS AND CRAFTS

Chapter VII

SIMPLE CARPENTRY

WHILE carpentry is not regarded as an accomplishment distinctively feminine, there is really no reason why a girl should not learn to drive a nail true and saw a straight line. Once the knack of using hammer, saw, and plane is acquired, it is surprising how much can be done, especially in the line of what may be called "shoe-box" carpentry. At the same time it is worth considering that the "shoe-box" system is a very limited one, and that a little intelligent study and practice will open for us a far wider and much more interesting field. The essential science of carpentry is really summed up in the making of a good box with real joints. Once you have succeeded in this further progress is easy.

Tools

Perhaps the principal reason why some girls make a sad mess of it when they attempt the art of woodworking is that they seldom possess the proper tools. And without good tools it is impossible to do satisfactory work in any department of craftsmanship. Certainly if carpentry is attempted at all, one should secure the proper implements, and be careful to keep them in good order.

Good tools may be purchased at nearly every hardware shop or general store throughout the country. For ordinary work you will require a good rip and cross-cut saw, with twenty and twenty-four inch blades, respectively; a claw-hammer, and a smaller one; a wooden mallet for chisels, and to knock together the lap joints of wood; a smoothing plane; a compass-saw; a brace and several sizes of bits, ranging from a quarter to one inch in diameter; a draw-knife; a square; awls; pliers; a rule; several firmer-chisels; a mitre-box; and a screw-driver. There are many other useful tools, but they may be added as they are required.

The handling of tools is a difficult matter to explain on paper; the only really satisfactory plan is to watch a carpenter at work, and see how he does things. The proper use of even such simple tools as hammer and saw is quite another thing from the ordinary slap-dash method evolved, as we may say, under the light of nature.

Joins

The making of simple joints lies at the bottom of all real carpentry; indeed, without good joiner-work there is no such thing as carpentry at all. There are a great variety of joints employed in carpentry, but many of them are too complicated for the young carpenter to make, and the simple forms will answer every reasonable requirement.

The easiest joint to make is the straight, or box, joint. It is constructed by butting the end of one board against the edge of another and nailing, or screwing, them fast.

SIMPLE CARPENTRY

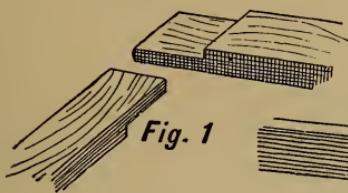


Fig. 1



FIG. 2



FIG. 3

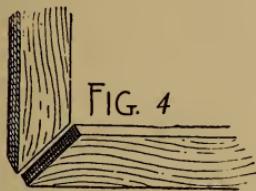


FIG. 4

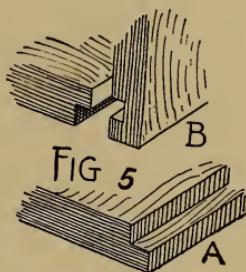


FIG. 5

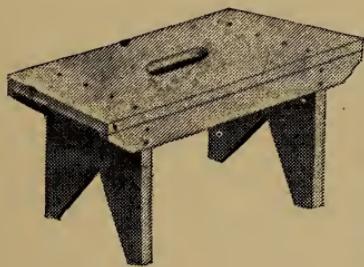


Fig. 6

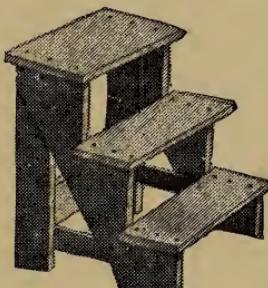


Fig. 8



FIG. 7

Fig. 1 shows a lap-joint made by cutting away a portion of the wood on opposite sides of the ends which are to be joined. When fastened the wood will appear as a continuous piece. For corners and angles, where a mitre-box is not available, the lap-joint is a very good substitute, and

HANDY-BOOK FOR GIRLS

for many uses it is stronger than the mitred-joint, and, therefore, to be preferred.

Fig. 2 is another form of lap-joint, where the end of a strip is embedded in the surface of a stout piece of wood. This joint will be found useful in furniture work, and also for picture-frame construction.

Fig. 3 is a bevelled lap-joint, and is used for timbers and posts, particularly under conditions where the joint can be reinforced by another piece of wood at one or two sides.

Fig. 4 is the mitred-joint. In narrow wood it is usually cut in a mitre-box with a stiff back saw to insure accuracy in the angles. The mitre-joint is employed for picture-frames, screens, mouldings, and all sorts of angle-joints.

Fig. 5 A is a rabbet. It is cut on the edges of wood, and another similarly shaped piece fits into it. It is also useful where wood laps over some other material, such as glass or metal. The inner moulding of picture-frames is always provided with a rabbet, behind which the edge of the glass, picture, and backing-boards will fit.

Fig. 5 B is a rabbet-joint made with a rabbet and groove. It is a good one to employ for box corners, and where the edges of two pieces of wood come together.

A Low Bench

Small benches are useful to work upon when sawing, nailing, and matching boards; and they are handy for many purposes about the house. The low bench shown in Fig. 6 is fifteen inches high and twelve inches wide, and the top is twenty-two inches long. The foot-pieces are cut as

SIMPLE CARPENTRY

shown in Fig. 7, and at the upper end at each side a piece is cut out to let in the side-aprons. The aprons are three inches wide and seven-eighths of an inch thick; they are held to the foot-pieces with glue and screws. In the top a finger-hole is cut so that the bench may be quickly picked up and the more easily handled.

A Step-Bench

A step-bench will be found useful for various purposes. It does not take up so much room as a step-ladder and affords a more solid footing. The bench shown in Fig. 8 is thirty inches high, fifteen inches wide, and eighteen inches deep. The uprights that support the sides are five inches wide; the treads of the first and second steps are six inches wide, and that of the top step eight inches wide. The wood is seven-eighths of an inch thick, planed on both sides, and all the unions are made with screws. The cross-brace at the back and near the bottom is set into laps cut in the edges of the upright supports, and to prevent the support and side-pieces from spreading, stanchion-bars may be screwed fast to the sides, under the first tread, and to the foot of the uprights.

Two or three coats of paint will finish these benches and make them fit for use about the house.

A Shoe-Box

A shoe-box and seat (Fig. 9) is a useful piece of furniture in any bedroom. Two boxes, purchased at a grocery store,

may be made to serve the purpose, but for a really neat and workman-like job the frame should be constructed of boards three-quarters or seven-eighths of an inch in thickness. A good size for the shoe receptacle is twenty-four

Fig. 9

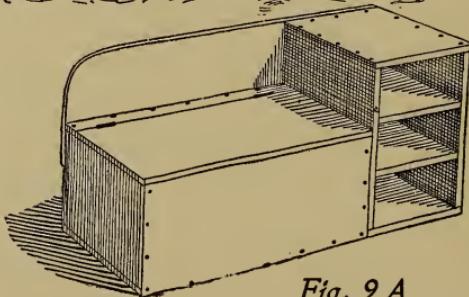
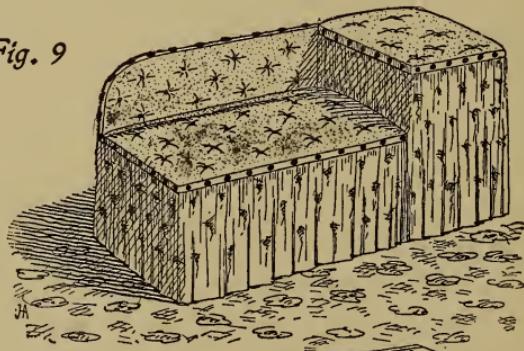


Fig. 9 A

inches high, fifteen inches deep, and sixteen inches wide. The seat-box should be thirty inches long, and fifteen inches high and deep.

These boxes are to be attached to each other with stout screws, and a back the length of the two boxes, and having a rounded corner is to be securely fastened to the rear of each box, as shown in Fig. 9 A. In the shoe-box two shelves are screwed fast, and to the lower box a cover should be arranged on hinges so that it may be raised from the front.

SIMPLE CARPENTRY

The back and seat and also the top of the shoe-box should be covered with denim, under which a padding of hair or cotton may be placed. The denim should be caught down with carriage-buttons and string, the latter being passed through holes made in the wood and tied at the underside. Around the front and sides a flounce of cretonne or denim may be gathered, and hung from the top edge of the box and seat. If finished with gimp and brass-headed tacks it will present a good appearance. Where the drop-curtain at the edge of the shoe-box meets the seat the fabric is to be divided, in order that it may be drawn to one side when taking out or replacing shoes.

A coat of shellac, or paint, will cover such parts of the woodwork as are not hidden by the upholstery. Fig. 9 shows the finished article of furniture.

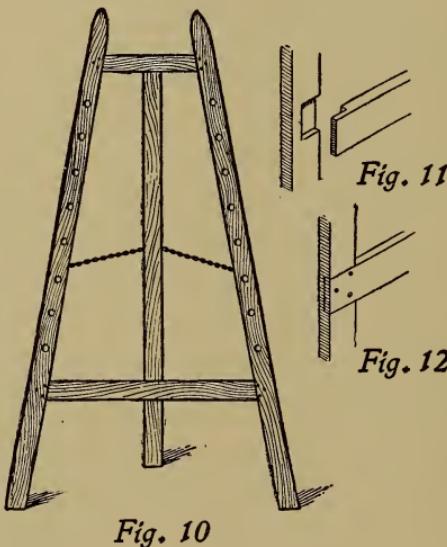
An Easel

Girls who have a talent for drawing and painting would undoubtedly like to have an easel on which to work, and a good strong one may be made, at moderate cost, in the following manner (Fig. 10):

Obtain four pieces of clear white pine six feet long, two and a half inches wide, and seven-eighths of an inch in thickness. These should be planed on all sides. Two of the sticks should be tapered off at one end, and slightly bevelled at the other. Nine inches from the top and twelve inches up from the bottom laps are to be cut in the sticks at the back, as shown in Fig. 11. Into these the ends of cross-pieces will fit. If the concealed lap is too both-

ersome to make, it can be cut clear across the sticks, as shown in Fig. 12. Glue and screws will make a strong joint.

The remaining long stick is the back support, or leg, and is to be hinged to the upper cross-piece. With this leg the



easel may be pitched at any angle, and to prevent it from going back too far a guide-chain should be attached to the leg, and the ends secured to the back of each upright with staples. Holes are bored along the uprights at even distances apart, and two wooden pegs are cut to fit snugly in the holes, and so hold a drawing-board or canvas-stretcher.

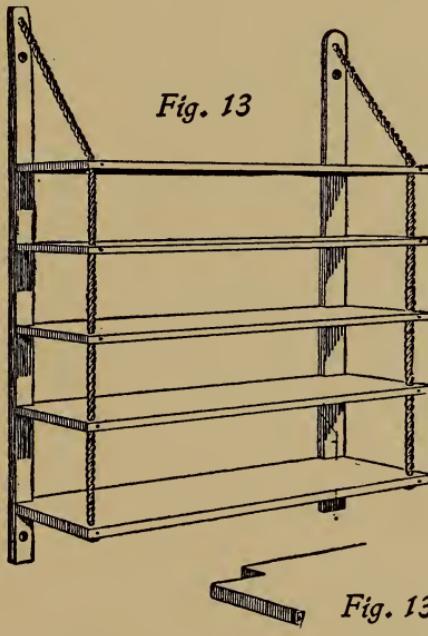
Hanging Book-Shelves

In a room where space cannot be given up to a standing bookcase, it may be possible to arrange a set of shelves to

SIMPLE CARPENTRY

form a book-rack that will hang against the wall. The construction of the hanging shelves shown in Fig. 13 is very simple, and will require but a few boards, two wall-strips, and a few yards of strong rope.

For the shelves, obtain five pine boards eight inches wide, seven-eighths of an inch thick, and from three to four feet long; also two pine strips three inches wide, an inch thick, and four feet long. In the rear edge of each board, at the ends, cut notches three inches long and an inch wide, as shown in Fig. 13 A, into which the wall strips will fit. Round



off the top of each wall-strip and screw them fast to the notched edges of the shelves, first boring gimlet holes in both strips and shelves to prevent splitting of the wood.

Half-inch holes at the top of each wall-strip will admit the suspension rope, which is of manila, and half an inch in diameter. Knot one end of the rope and pass it up through holes made at the outer corners of each shelf, and finally through the hole at the top of the wall-strips, and cut it off three inches back of the hole. With a gouge-chisel a groove should be made at the back of the wall-strip for an inch or two below the hole, so that the rope end may be carried down and ravelled out. It can then be glued and held fast to the wood with staples. Where the rope passes through the hole in each shelf, drive several long steel-wire nails into the edge and end of the board, allowing the nails to pass through the rope and into the wood.

Paint or varnish the woodwork, and securely anchor the wall-plates with stout screws driven into the frame timbers, through the lath and plaster of the wall.

A Plant-Box

For growing plants and flowers in windows or around a piazza rail, the plant-box shown in Fig. 14 will be found useful. One or more boxes may be made from pine boards an inch thick and eight inches wide. The boxes should be six inches deep, outside measure, and they may be as long as desired to fill the window or the spaces between the piazza posts.

Straight or box joints are made at the corners and fastened with screws. The inside of the boxes should be treated to several successive coats of asphaltum varnish to render them water-proof. Several small holes must be bored in the

SIMPLE CARPENTRY

bottom of each box to drain off surplus moisture, and the boxes and supports may be painted a color to match the trimmings of the house.

To anchor the boxes, screw a batten to the balustrade, on which the inner edge of the box may rest. The outer edge

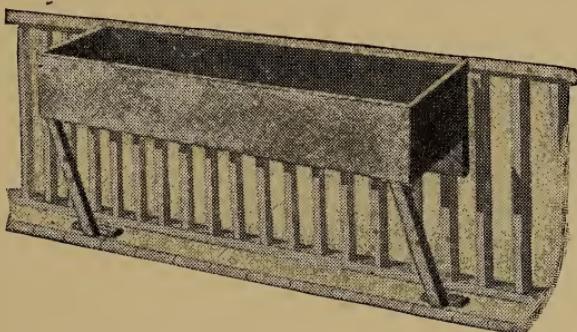


Fig. 14

is supported by means of braces attached firmly to the underside of the box and to the piazza floor, as shown in the illustration. Two small brackets attached to the underside of the box and to the batten will hold the box in place and prevent it from slipping off the top of the batten.

A Photograph-Box

There are so many amateur photographers at large in the country that some suitable receptacle for their work is a matter of no little importance. A box made to hold a particular size of photograph will prove very acceptable as a present, and a very serviceable possession for a girl to make for her own use. Fig. 15 shows a very convenient

HANDY-BOOK FOR GIRLS

form of box, and one that, considering the shape that is used, is not at all difficult to construct, because of a device of construction that will be explained. Four-by-five-inch photos are most attractive when pasted upon five and one-half by six and one-half inch mounts. For such mounts, then, the box should be six inches high and seven inches

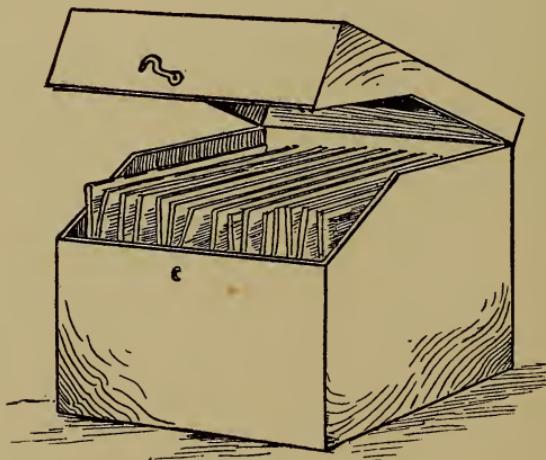


Fig. 15

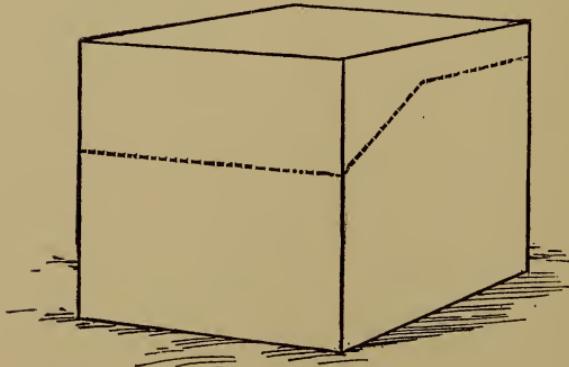


Fig. 16

SIMPLE CARPENTRY

from front to rear. Make the width eight inches. The cover and front are made in the shape shown for ease in taking out the individual photographs. This form is very easy to make. Select wood three-eighths of an inch thick, and make a solid box of the dimensions given, nailing top, sides, ends, and bottom securely in place. Now mark two sides and the front with a lead-pencil according to the dotted line in Fig. 16, then saw the top off on this line, using a fine saw, and cutting true to the line. Saw in from the front to the point where the line turns, then from the rear to the same. If the edges are sawed evenly, a little smoothing with sand-paper will make them fit nicely. All that then remains is to put on the hinges and a catch.

In making a box of any kind it is well to bear in mind that the front and back should lap over the ends, while top and bottom may lap over front, back, and ends. In a nicely finished box, however, it is well to have the front and back lap over the top, bottom, and ends, while the top and bottom lap over the ends. This gives a front without a sign of a joint.

An Improved Lunch-Box

Here is something that is easily made, and that will be of service to the whole family, especially if the family be of the picnic-going sort (Fig. 17). This box has a compartment at one end into which a zinc or galvanized iron "tank" is set. This little rectangular "tank" can be made by any tinsmith just to fit the end of the box. Fit a cross

HANDY-BOOK FOR GIRLS

partition of wood up closely to it, leaving the remainder of the box for the eatables. In the tank are to be placed the bottles of coffee, milk, or shrub, the space about them being filled with cracked ice. This ensures cool drink when

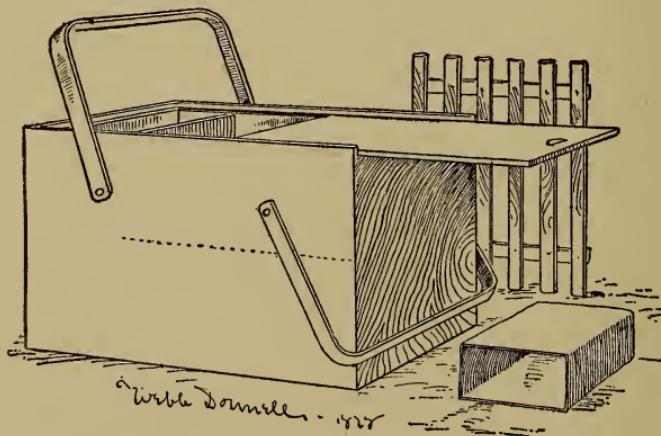


Fig. 17

lunch-time comes—a refreshment that comparatively few picnic lunches can boast. Across the remaining space, at the point shown by the dotted line, fit a slat shelf to rest upon side cleats. The lighter and more fragile articles of the lunch can be placed on the shelf or tray, where they will not be crushed or jammed by the heavier articles, that can thus be placed below them.

The box itself can be secured ready-made at a grocer's. Many of the smaller grocery boxes are made of nice wood, with excellently fitted corners (often "dove-tailed"). Spices and other articles come in such boxes, and one can secure just the size wanted.

SIMPLE CARPENTRY

The handles are made from two flat barrel-hoops, smoothed with knife and sand-paper. Soak the hoops in water, then bend them into the shape desired, and tie them in that position for a few days. Then fasten to the box with round-headed screws.

Chapter VIII

WOOD-CARVING

A KNOWLEDGE of drawing and modelling will be most helpful to the young carver, as then the outline of ornament can be readily drawn, while to carve objects from wood the art of modelling form is most desirable.

The most important feature of carving is the ability to sharpen and maintain the little tools, and when this is mastered, more than half the difficulty has been overcome. The dexterity to handle, with a firm and sure hand, the various chisels and gouges comes, of course, with practice only.

It is better to begin with a soft wood. Pine, poplar, button-wood, cypress, or red woods are all of close grain and are easy to work. The harder woods, and those with a very open grain—such as chestnut, ash, and oak—should not be carved until the first principles are learned in the softer woods.

Carving takes time, and it is not an art that can be quickly mastered, unless it be the chip-and-line variety. But this last can hardly be compared to the more beautiful relief-carving, with its well-modelled form and undercutting.

Tools

At the start a numerous assortment of tools will not be necessary, as the flat work and chip-carving will naturally be the first department of the art to be taken up by the young carver.

Six or eight chisels constitute a good set, and those shown from Fig. 1 to 6 will answer very well. Fig. 1 is a plain, flat chisel with a straight edge, as shown at A; it is commonly called a firmer. Fig. 2 is also a flat tool, but possessing an angle or oblique edge; it is commonly called a skew-firmer. Figs. 3 and 4 are gouges. Fig. 5 is a V gouge, and Fig. 6 is a grounder. G, H, I, J, and K are gouges of various circles. L is an angle, or V, gouge. M, N, and O are gouges of various curves, and P, Q, and R are V gouges of various widths and angles. These last are used for furrows, chip-carving, and lining.

A flat felt or denim case should be made for the tools, so that they may be kept in good order. It is made of two strips of the goods, one wider than the other. Two edges are brought together and sewed, and lines of stitching form pockets for the chisels. The flap left by the wider strip of goods is folded over the chisel ends, and the pockets containing the tools may be rolled up and tied with tape-strings. When opened it will appear as shown in Fig. 7. The edges of chisels kept in this manner are insured against injury and rust, since the case protects them from atmospheric moisture.

The stones needed for sharpening the tools will be an ordinary flat oil-stone (preferably a fine-grained India stone), and two or three Turkey or Arkansas slips, four or

HANDY-BOOK FOR GIRLS



FIG. 1.



FIG. 2.



FIG. 3.



FIG. 4.

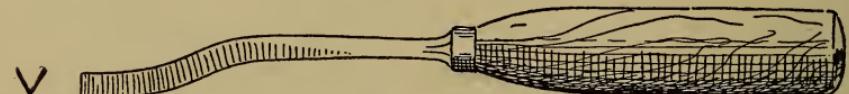


FIG. 5.

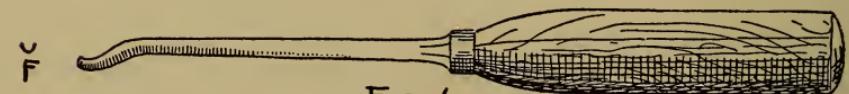


FIG. 6.



five inches long, having the shapes shown in Fig. 8. A, with the rounded edges, is for the gouge tools; B, with the sharp edges, is for V-shaped tools; and any of the flat chisels may be sharpened on the regular oil-stone, C.

WOOD-CARVING

In Fig. 9 end views of some slips are shown. A and B are round-edged slips for gouge-chisels; C and D are angle stones for V chisels; while small, flat tools may be finished on the sides. These stones are held in the hand, and lightly but firmly rubbed against both surfaces of a tool to give it the fine cutting edge.

In Fig. 10 an oil-stone in a case is shown. A boxed cover fits over it and protects it from grit and dust. This

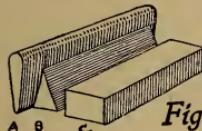


Fig. 8

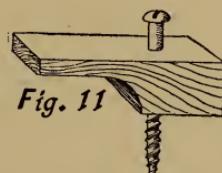


Fig. 11

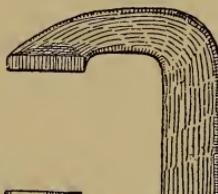


Fig. 12

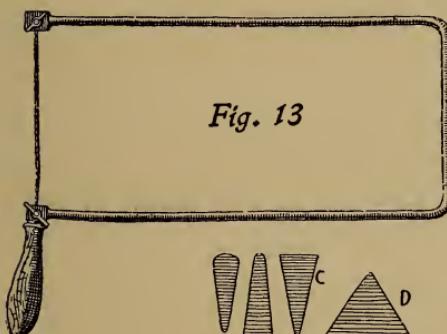


Fig. 13

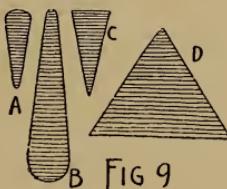


Fig. 9

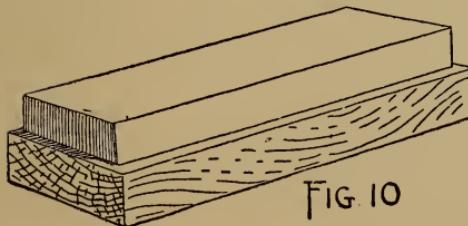


Fig. 10

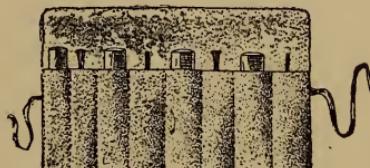


Fig. 7

is important, for often a little gritty dust will do more harm to the edge of a fine tool than the stone can do it good.

The other tools necessary to complete the kit will be several clamps, similar to those shown in Figs. 11 and 12, and a fret-saw (Fig. 13). If you happen to possess a bracket-machine or jig-saw the fret-saw will not be necessary. A glue-pot will also be found useful.

The first essential to good, clean cutting is that the tools shall be absolutely sharp and in a workman-like condition. It is often the case that an amateur's tools are in such a state that no professional carver could produce satisfactory results with them. And yet the variety of carving tools is so limited that if the difficulties of sharpening a firmer and gouge are mastered the task is practically ended.

If the tools should be unusually dull they must first be ground on a grindstone, and as carvers' tools are sharpened on both sides, they must be ground on both sides. The firmers may be sharpened on the oil-stone laid flat on the bench, but the gouges must be held in the hand, in order to sharpen the inside curve with a slip. The outer curve can be sharpened on the flat oil-stone, or held in the hand and dressed with the flat side of a slip. Great care must be taken to give the tools a finished and smooth edge. When they have reached the proper degree of sharpness it will be an easy matter to cut across the grain of white pine, leaving a furrow that is entirely smooth and almost polished.

In the use of the oil-stone and slips, neat's-foot oil, or a good, thin machine oil, should be employed. Astral oil is too thin, but the oil sold in small bottles for sewing-

machines or bicycles will answer every purpose. Water should not be used, as it would spoil the stones, and not produce the sharp edge on the tools.

The tools being in proper condition, the next step is to acquire a knowledge of the best methods of handling them. It will require some time and practice to become thoroughly familiar with the manner in which tools are used, and, if it is possible, it would be well to watch some carver at work.

The chisels should always be held with one hand on the handle, with two fingers of the other hand near the edge of the tool. This is to give sufficient pressure at the end to keep it down to the wood, while the hand on the handle gives the necessary push to make the tool cut.

Chip-Carving

To begin with, it is best to work on a simple pattern that can be followed easily.

Get a piece of yellow pine, white-wood, or cypress seven-eighths of an inch thick, six inches wide, and twelve inches long. On a piece of smooth paper draw one-half of a pattern similar to the one shown in Fig. 14, or you may use any other simple design that is free in line and open in the ornament. Upon the wood lay a sheet of transfer-paper, with the black surface down, and on top of the transfer-sheet the paper bearing the design. Go over all the lines with a hard lead-pencil, bearing down firmly on the point, so that the lines will be transferred to the wood. Turn the design around and repeat the drawing, so that the wood

HANDY-BOOK FOR GIRLS



Fig. 14

will bear the complete pattern. Clamp the wood to one side or corner of the bench with three or four clamps. Do not screw the clamps directly on the wood, but place between the jaw and the wood a piece of heavy card-board,

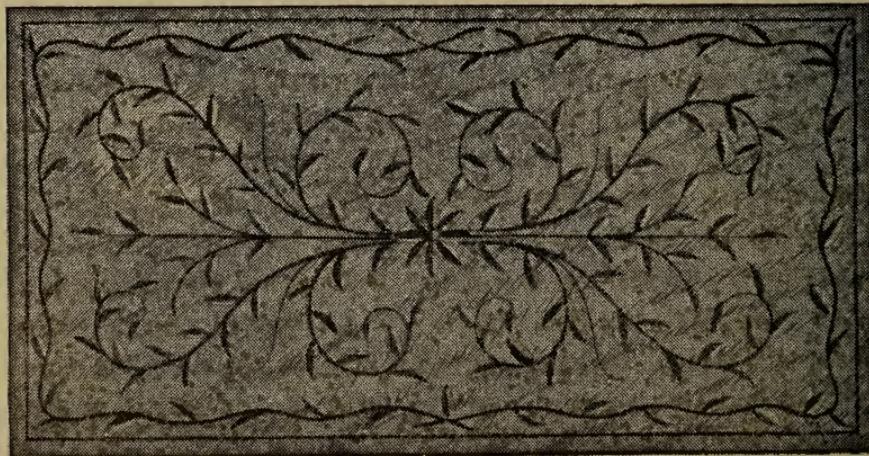


Fig. 15

WOOD-CARVING

or another piece of thin wood, to prevent the clamps from bruising the surface of the panel.

First, with a small V, or gouge-chisel, cut the lines; after that the leaves, using a flat, or spade, chisel. Two curved incisions will shape out the leaf, and the angle through the centre describes the main vein. The chipping may be shallow or deep, as a matter of choice, but more effect may be had by cutting fairly deep.

The finished result will appear as shown in the illustration of the chip-carved panel (Fig. 15). For light orna-



Fig. 16

menting or drawer-panels, fancy boxes, and picture-frames, this form of carving may be made both pleasing and effective. Moreover, its mastery leads naturally to the more artistic relief-carving.

Relief-Carving

Relief - carving differs from the chip work in that the ornament is raised instead of being cut in. Solid relief-carving, such as appears on panels, box-covers, and furni-

ture, is produced either by cutting the background away or by carving the ornament separately and then gluing it onto the surface of the article to be decorated. Of course, this latter process is only a makeshift, and the first method is the really artistic one.

It is best to begin with something simple and then go on to the more complicated forms of ornamental work. A neat pattern for a long panel is shown in Fig. 16. This panel is twelve inches long and four and a half inches wide.

On a smooth piece of paper draw one-half of the design and transfer it to the wood, as described for the chip-carved panel. Clamp the wood to a corner of the bench and, with a small wooden mallet and both firmer and gouge chisels, cut down on the lines and into the face of the wood. Then, with the gouges and grounding-tool, cut away the background to a depth of one-eighth of an inch or more, until a

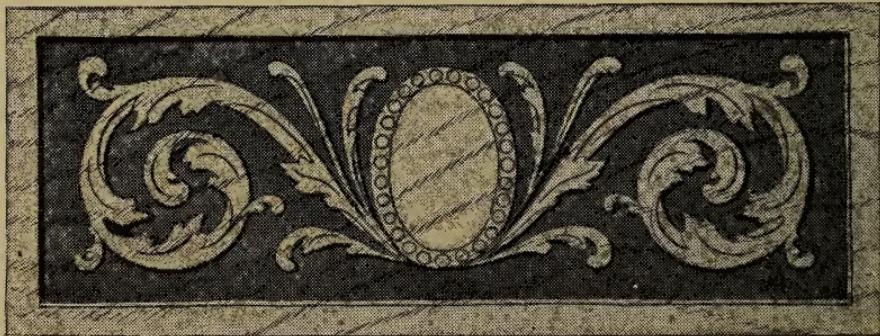


Fig. 17

result is obtained similar to that shown in Fig. 17. The entire design and edge of the panel will then be in relief, but its surface will be flat and consequently devoid of artistic

feeling. With the flat and extra flat gouge-chisels begin to carve some life into the ornament. A little practice will soon enable the young craftsman to observe which parts should be high and which should be low. The intermediate

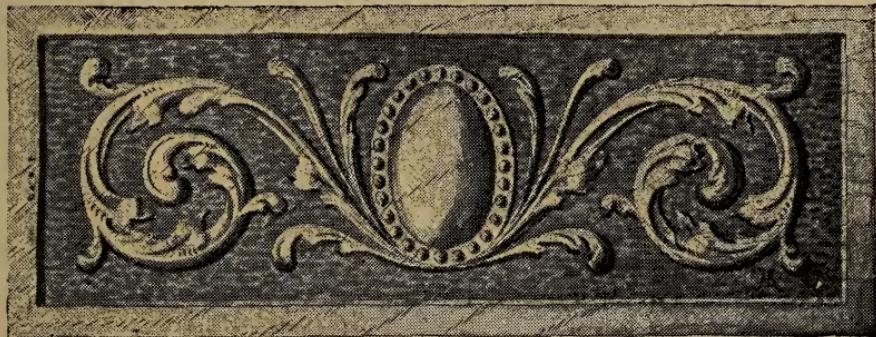


Fig. 18

surfaces should be left neutral, or between high and low relief. This finishing process depends for its effect upon the good taste and feeling of the craftsman; it is the quality that gives artistic beauty and meaning to the work. The panel, when completed, should have the appearance shown in Fig. 18.

The “Applied” Method

As already stated, the general effect of relief-carving may be also obtained through the “applied” method, a simpler and less tedious process, but neither so artistic nor so substantial.

The design is transferred to a thin piece of wood and cut out with a fret or jig saw. Fig. 19 shows a suitable pattern for this class of work. The pieces are then glued in

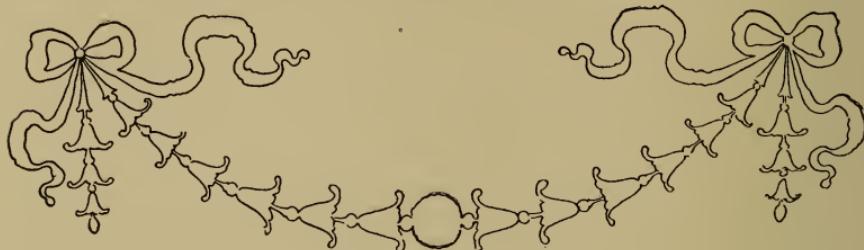


Fig. 19

position on a thick piece of wood, and the "feeling" carved in after the fashion already indicated. This "applied" carving may be used on the panels of small drawers, cabinets, and boxes of various sizes and shapes. The inventive girl will be able to design patterns for herself, or they may be cheaply bought. Fig. 20 shows the effect of the finished work.

To finish wood in any desired color, stains may be purchased at a paint or hardware shop. Over the stained sur-



Fig. 20

face, when dry, several thin coats of hard-oil finish or furniture varnish should be applied. The back and edges of a carved panel must always be painted to protect them from moisture and dampness; warping and splitting are thereby

WOOD-CARVING

avoided. Some pieces of carving need only a coating of raw linseed-oil, while others may be treated to a wax finish composed of beeswax cut in turpentine, rubbed in with a cloth, and polished off. Another method of darkening oak (before it is varnished) is to expose it to the fumes of ammonia, or to paint on liquid ammonia, with a brush, until the desired antique shade is obtained. The staining process, however, is preferable.

Chapter IX

WIRE-WORK

TO begin with, it is necessary to obtain several yards of soft iron wire varying in sizes from No. 12 to No. 18, also a small roll of soft wire about the size that florists employ to attach flowers to short sticks when making up bouquets.

The tools needed will be a flat and a round nosed pair of pincers, or pliers (see Figs. 1 and 2), a wire-cutter, and a tack-hammer. You will also need a sheet of smooth brown paper and a soft lead-pencil with which to draw the patterns.

A Bird-Cage Bracket

Begin by making simple things; then as you succeed in producing good work you will be able to take up the more difficult patterns. A bird-cage bracket is an easy object to start with. Enlarge the design shown in Fig. 3 so that it will be sixteen inches high, with the hook-arm projecting seven inches from the main upright rod.

The pattern is to be drawn out the full size on smooth brown paper; then the wire should be bent and shaped over the lines to conform to the design. Use very heavy wire

WIRE-WORK

for the upright and projecting arm, and a smaller size for all the scroll-work. The finest copper wire should be used to bind the scrolls together, and so make tight unions

where two edges of wire come together and where the wires cross.

The iron wire should be given two coats of good black paint, or,

if desired, it may be gilded or silvered. An excellent black preparation for iron may be made by thinning ivory-black ground in oil with equal parts of Japan dryer and turpentine. Or you may try

adding a little lamp-black to brass lacquer or shellac.

The paint should be applied to the iron with a soft hair brush, and

the first coat must be well dried before the second one is applied.

A Photograph Easel

Fig. 4 shows a design for a photograph easel that will make an attractive table or mantel ornament if neatly constructed from wire of medium size. It should not measure more than nine inches in height, and where the lattice-work

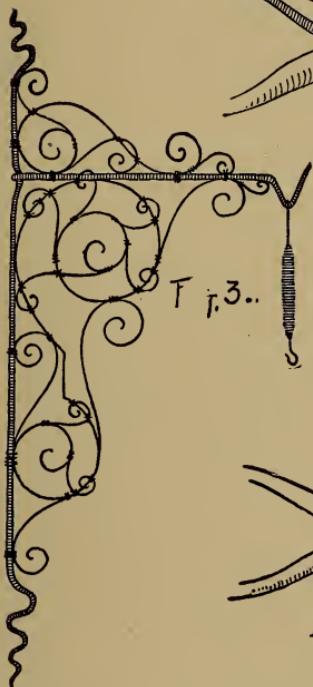


Fig. 1



Fig. 2

HANDY-BOOK FOR GIRLS

joins the lower cross-bar two hooks should be arranged on which the photograph can rest.

A back support, or prop, to the easel may be made of wire, and soldered to the bar at the upper edge of the lattice-work. The lattice need not be made of as heavy wire as the scroll-work, and where the strands cross each other the junctions are to be securely bound with fine wire.

Larger easels may be made for small framed etchings, for panel photographs, or for other purposes, but as the size of the easel is enlarged the thickness of the wire should be increased to give additional strength.

By reducing the size of the lower scrolls this design would be quite appropriate for a lamp-shade, and instead of the lattice-work a piece of prettily colored silk or other translucent material may be inserted to serve as the backing.

A Match-Box

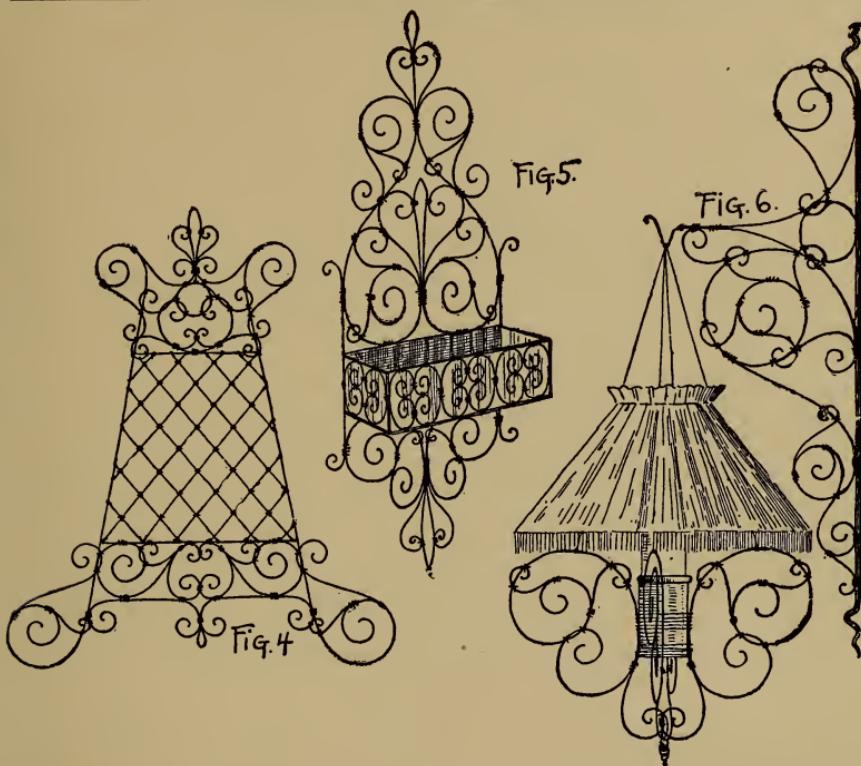
An attractive design for a match-box is shown in Fig. 5. The total height of the back piece should be nine inches, and the width three inches. The match-receptacle should be an inch deep and project one and a half inches from the wall.

It should be lined with silk or other goods, to prevent the matches falling through the open-work of the grille. Finished in black, with a red or orange colored silk lining, this match-receptacle will be found both useful and ornamental.

A Fairy Lamp

A hanging fairy lamp, like the one shown in Fig. 6, makes a pretty ornament for the parlor or living-room,

WIRE-WORK



The bracket part is made in a similar manner to the birdcage bracket, and should be of stout wire. The candle-sconce, or lamp part, is built up of four sets of scrolls arranged about an old tin candlestick top, and securely bound together with strands of fine wire closely wrapped.

By using brass wire soldered at the unions a stronger construction is possible.

The sconce should be suspended from the bracket-hook by means of four light wires. These latter may also support a canopy shade made over a light framework of wire.

Ordinary colored candles will look well in this fairy lamp.

To keep the colors in harmony it would be well to obtain candles of a tint that will match the color of the silk shade. The lamp may be fastened to a door or window casing, or perhaps to the side of a mantel-piece.

A Picture-Frame

Fig. 7 shows the design for a picture-frame that is intended to hang against the wall. The frame proper may

be made of very narrow picture-frame moulding around which the grille-work is arranged. Where the latter touches the woodwork it is to be made fast with small staples driven in the outer edge, and the ends clinched at the inside, or rabbet, of the frame. Or



FIG. 7.

fine wire may be used in place of the staples.

If an all-iron effect is desired, the rabbet should be made of thin stove-pipe iron or sheet-brass, bent into angular form and finally shaped to the required size. Around it the

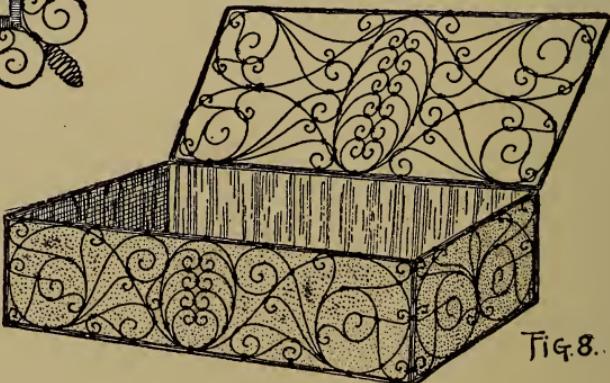


FIG. 8.

WIRE-WORK

grille-work is to be made and bound, in about the same proportion as shown in the drawing.

A Glove-Box

A design for a glove-box is shown in Fig. 8. It should be ten inches long, five wide, and three inches high.

The bottom should be made of a thin piece of wood, and the entire inside, including the top, should be lined with some handsome and substantial material in bright colors.

The four sides and the top should be made in separate pieces, and afterward bound securely together with fine wire.

Chapter X

LEATHER-WORKING

UNLIKE many crafts, the essential implements of leather-working are few in number. To transfer upon leather, a pointed tracer of metal, agate, or even an orange-stick is employed. For carving, a little knife is used which is sharpened at an angle on the end, and *not* on the side of the blade, as Fig. 1 shows. The opener and modeller is the tool used, as its name implies, to open the leather along lines previously cut, and the modeller, likewise, may be used for this as well as to flatten down or raise certain portions of the design. A small, light-handled hammer is absolutely necessary. Any large art-store or shop selling craftsmen's tools should be able to supply the foregoing implements. A few sets for background work are, of course, necessary. We may as well confess that fancy runs riot regarding the number eventually demanded, but good results are obtainable when only the simplest are used. These little tools are of steel, variously cut and engraved, and used to stamp the leather with their different devices. Simplest to use in this way are the nail-head sets, which, in many sizes, are found at hardware-shops. With them we make circles of various sizes. A steel rod, one-eighth inch in

LEATHER-WORKING

diameter, may be used if cut to desired length and the end scored with diagonal or parallel lines. This may seem quite hopeless to a girl, this making of tools, but every-

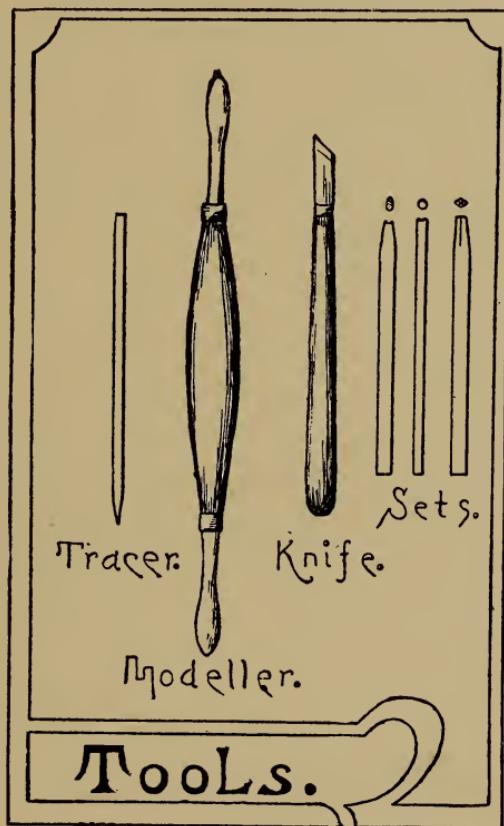


Fig. 1

where one comes across some handy man who can properly file up and emery down a few tools for leather-work if the feminine experimenter is too far removed from a base of supplies. Manual-training movement in the schools through-

HANDY-BOOK FOR GIRLS

out the country has brought leather-work much in evidence, and accordingly the tools are no longer hard to procure, but only in Europe may one find an assortment of sets. In this country workers depend upon making their own or having them made by machinists.

A slab of marble is also necessary, for one needs an unyielding surface when doing the tooling. A very weak solution of oxalic acid is useful to remove spots, but must be extremely weak, else it will remove both spot and surface, and one will be confronted with a blemish which art may not hide.

The last rite in leather-work is the wax finishing, and for this ordinary floor wax is most excellent.

The Material

Russian calfskin is the leather best suited for tooling when fashioning small articles, for it is easily cut and handled. Cowhide makes excellent pillows or heavy mats, but from its texture and weight is not practical for really dainty work. Only a little experience will be required to recognize the proper weight of calfskin; it must not be too thin, and if very thick will be clumsy.

Leather is generally bought by the whole or half hide, and charged for by the square foot. The size of the hide never seems to agree with the size of the bill, and, accordingly, one learns to practise economy, and, by cutting the leather with straight, true lines, to leave remaining portions in the most workable condition.

The Process

With all tools and material of proper size at hand, one begins to work, first placing the design upon the leather. For this the leather is moistened with tepid water, and the design, upon either heavy manila paper or muslin, is laid over and traced on with the tracer. Next, the design is cut, or merely portions of it may be cut. With the work still moist, cut directly on the tracing line, just a grain beneath the glazed surface of Russia leather, but deeper, of course, for a heavier hide. Never make a slip—use a ruler, if desired, for straight lines. Never cut up to the very tip of a corner, but leave a wee bit of leather to hold things together; a successful result hangs on this little thread of leather, for, once cut clear, the corner point ever twists and pokes itself into a nowise ornamental obtrusion.

The next step is to open the design's cut lines and to model those uncut. For opening, the smaller end of the modelling-tool is used. It is held upright in the right hand, guided by holding it against the outer edge of the left index finger, which, with the left hand flat on the leather, should be made to swing as a pivot. As the tool must be held firmly against this finger, it is wise to protect it with a band of leather. The tool must move evenly and firmly, and one soon sees how a little bevel edge may be formed on one or both sides of the opened line. What may be called dragging the tool will flute the leather instead of bevelling it—a very objectionable trick, brought about by allowing the tool to sag in the hand along the direction of the line followed, as is natural when holding a pen or pencil. The marble slab

HANDY-BOOK FOR GIRLS

should be placed under the work after the leather has been cut, and until *all* carving and tooling are finished the work must be kept moist.

In using the background sets practice is the main requirement after one fixes in mind to hold the tool perfectly upright and to strike with even hammer blows. Always to lift the hammer equally and let it fall upon the tool-head is better than to actually strike each blow. An even surface in tooling is the aim, and this can only be brought about by even blows.

A tiny piece of floor-wax, well wrapped in muslin, may be rubbed over the leather as a finish. Let this be done near the fire, so that the heat will help distribute it. Allow it to dry for a few minutes, and then polish with a soft cloth, and, if streaked, keep near the fire until these lines evaporate.

A Card-Case

Attractive work is shown in the card-case illustrated in Fig. 2 A and B. On an oblong of leather, four and a half by six inches, the design was transferred, carved, and modelled. The card-case lining may be either of leather or of silk; the latter, however, never fits as well as leather, and ooze goat or the leathers used in bookbinding, called skiver, are far more satisfactory. Cutting the case and its pockets requires a sharp knife and true angles. Fold the outside of the case while still damp, and allow to dry before adding the leather lining. Next, put in the lining leather, securing it with flour paste around the edges, and making sure that it fits well up into the fold at the centre of the case.



Fig. 2 A

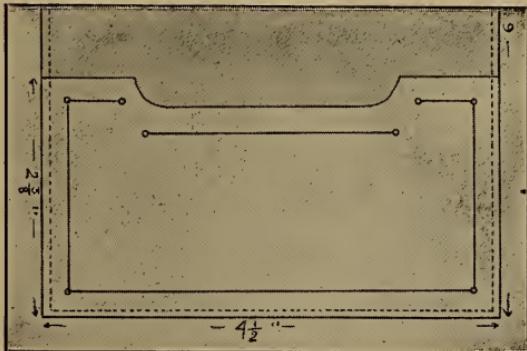


Fig. 2 B

After this, hold the pockets in place, and, if possessed of a lock-stitch machine, sew the case together.

A Book-Cover

The book-cover (Fig. 3) has an interlacing design very simple to carve, its background being sunken by pressing the leather down with the modeller. Inside, it is finished much like the card-case, pockets being laced to the outside with one-eighth-inch thongs of leather,

A Table-Mat

In the ten-inch mat the background is tooled, but this, like the book-cover, may be merely pressed down, if desired.

Coloring may be introduced in all of the designs. Aniline dyes are simple to use, mixed with alcohol or water. Keep the leather quite moist while working; use sponges to apply the dye where an entire surface is to be covered with one

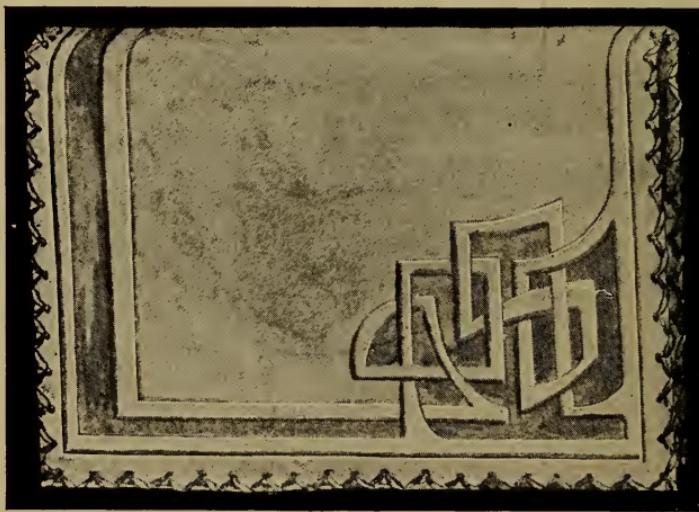


Fig. 3

color, putting the color on lightly and sponging up, down, and crosswise to keep out streaks. Deepen by means of successive baths.

An Opera-Bag

An extremely dainty opera-bag made of white lambskin is illustrated in Fig. 5. This leather is too soft for tooling,



Fig. 4



Fig. 5

DESIGNS FOR LEATHER WORK

HANDY-BOOK FOR GIRLS

so the design was traced on in pencil and outlined with a fine brush and brown waterproof ink. A pretty scheme of tans and yellow was carried out in coloring the design. The top of the bag was faced with tan ooze leather, like the lacings. A soft satin lining was sewed to the base of this top facing, which extended just below the drawing thongs, the ends of which were finished with yellow beads.

Tooled and Embroidered Leather Trimmings

Coats or suits having trimmings of leather always carry with them a certain distinctive air, which one is at a loss to obtain when employing more customary materials. Leather of several sorts is thoroughly suitable for trimming outer garments, and it likewise may be ornamented in different manner, depending upon the sort of leather selected. For fine Russian calfskin tooling and carving will be the best methods of decoration, but for so-called Suède or ooze-finished leathers, either goat, calf, or sheep skin, embroidery in silk or mercerized flosses is better suited.

Collars, cuffs, revers, and buttons may all be made of leather; and while embroidered leather is extremely simple, tooled leather will not prove difficult if carefully undertaken.

A Collar-and-Cuff Set

Two sections for a rolled collar, with a deep cuff to match, and button, are illustrated in Figs. 6 A and 6 B, and are designed for a strictly tailor-made garment. They are



Fig. 6 A



Fig. 6 B

tooled upon fine champagne-tinted Russian calfskin, and in the illustration the design is distinctly conventional, borrowing slightly from the Arabesque in suggestion. The pattern may be emphasized by coloring it a little darker than the background, using a very weak mixture of dye for this purpose.

Leather Embroidery

Embroidery on leather is very simple, and in Figs. 7 A, 7 B, and 7 C a set of embroidered vest, cuffs, and buttons is pictured.

Tan goatskin with ooze or Suède finish was selected for this, as it is of softer texture than sheepskin, and much less expensive than calfskin. The modified fret design is indented from a muslin pattern, and then burned with a very light line, a pyrographic point being used. After this the design is colored in a dull shade of green (between sage and olive), the color being obtained by a light wash of purplish blue, which is modified to green by the tone of the leather. A border of Indian red finishes each piece, while the border outline is made of a row of black back-stitch, which is whipped over by green, giving the effect of a twisted cord.

All the embroidery is simply done, in outline-stitch and French knots. A heavy mercerized floss, resembling silk, may be used instead of silk if preferred. This, or the twisted rope silk, is used with a carpet-needle. One must take care not to tear the leather with the large needle, and while stitches must be uniform they must not be too small.

It is the color scheme which makes this coat trimming so delightful; sage, old-gold, and black predominate, while occasional dots of coral pink give an accent of brightness. The outline of the design is green at times, then gold or black at others; and parallel edges of the pattern always show contrasting colors, as can be seen even in the black-and-white reproduction.

Leather buttons must be embroidered or tooled before

LEATHER-WORKING

being made up. Any tailor or dressmaking-supply establishment will know where to have them made up. Buttons with rims are the only ones suitable to leather, which is too heavy to be used in machines covering plain buttons.

Leather trimmings are attached with machine stitchery



Fig. 7 A



Fig. 7 B



Fig. 7 C

HANDY-BOOK FOR GIRLS

to any garment where pieces are joined, as in collar and revers sections. They may be overhanded together on the wrong side of ooze leather; or with a glazed leather they may be slot-seamed against a piece of ribbon or binding. Any doubling of glazed leather is to be avoided, as it is generally far too bulky for such treatment.

Chapter XI

THE ART OF ENAMELLING

THE art of enamelling is within the reach of any girl who is willing to bring her latent gifts into play.

It is generally supposed that enamelling entails expensive lessons from an expert, and that a knowledge of making jewelry is essential; but this is not so, as it is only necessary to understand the process of enamelling and the cutting of the metal to receive it. All the mounting can be done by a jeweller. It is best to find a working jeweller who will take an interest in carrying out the ideas of the enameller, and who is content to charge for labor only. It is also possible to make use of the cheap jewelry which can sometimes be picked up in such good designs. When the metal is covered with enamel, it only requires an edge to protect it from being chipped, which can be added by the working jeweller.

The Kiln and Tools

The work will require some outlay for the necessary tools and kiln; but it is best to get only a small stock of tools at first, and add to them as they are needed.

There are three kinds of kilns—charcoal, electric, and gas;

the latter is usually the most convenient. Inside a kiln is fitted a "muffler"—a hollow, semi-circular shaped piece, the opening of which is just the size of the door. The flames burn around and underneath the muffler, and must never come in contact with the enamels. When ready for firing, enamels are put on small iron plaques, which must be kept scrupulously clean with whitewash, for if the irons come in contact with the enamel it would spoil the colors. The furnace must be brought to a white-heat, and the plaque carefully set in the muffler with the pincers. The door, which is in two pieces, is then put in place. The time of firing varies from two and a half minutes to five, but the enameller must learn by experience just how long to fire the pieces. Sometimes they require three or four firings. Each time the enamel is painted over the glass already fired.

Preparing the Colors

Enamel is made of powdered glass, which is bought in small lumps; a skilled worker will use as many as forty colors, but it is best for a beginner to start with about six. The glass should be kept in envelopes, and the name of the color written on the outside. A couple of mortars with pestles and some cups must be provided. Put the colored glass in the mortar, and cover the lumps of glass with water to prevent particles flying about the room. First break the lumps into little bits, not directly with the pestle, but by pounding the pestle down upon them with a wooden mallet. Then crush these bits into powder with the pestle. With some colors the powder must be finer than with

THE ART OF ENAMELLING

others, but this point can only be determined by experience.

After the crushing, the powder is very carefully washed. Part of the secret of beautiful clear color lies in many washings—sometimes fifty or sixty. At first the water is very cloudy, and dust rises to the top. Again and again the water must be poured off and fresh poured on; wash until the water is absolutely clear and the glass powder all lies at the bottom. The glass must be washed as it is needed, or dust will get in and dull the color. The enamel is now ready to be painted on the metal, which may be gold, silver, copper, brass, or iron—even tin can be utilized. Long ago enamellers had to have banks, or beds, of metal to keep the enamel in place, but to-day the color is kept “still” without metal boundaries, and the process only requires that the enamel be applied like paint.

The Metal

The metal can be procured in small sheets of various thickness; a medium weight or gauge is best suited to enamelling. First draw a design on thin Japanese tracing-paper, and paste it over the metal; then, with a jeweller's fret-saw, cut out the design, following the lines of the pattern. It is best to begin on simple things, such as tops for umbrella handles, lids of boxes, or hat-pins and buttons, using articles that can be bought in the shops, and adding the distinctive touch of good enamelling to them. Suppose a silver box is bought with a concave lid. Fig. 1 shows such a box ornamented by the figure of a swan, a most effective

HANDY-BOOK FOR GIRLS

design. This may be engraved, which is scratching a simple design with an engraving tool, or, if preferred, the top of the box could be hammered instead of engraved. Place the metal on a piece of iron, and use a small tool called a "cup tool." Hammer this tool with a wooden mallet,



Fig. 1

which will make a small round ring-rising relief. Some workers use only a fourpenny nail filed blunt at the point, but the cup tool makes the work easier for an amateur. After engraving or hammering, clean the piece with powdered pumice-stone and water; then polish with a bursisher until bright. This must be done on both sides, and has to be repeated after the article is enamelled and fired,

THE ART OF ENAMELLING

The metal assumes a bright, lustrous finish, whether it is brass, copper, or silver, after the burnishing, and is then ready to be enamelled.

The Process

Mix the color with some water to a paste and paint the colors on, according to the design, or give the piece a coat of one color all over, using a fine sable brush. Some workers use a small pen-knife, or palette-knife, when only one color is used. This must not be fired until the "paste" is dry. Too much color must not be put on at once—just a thin coat, and then the piece is fired. Solidity is given by successive paintings, each of which has to be fired. Some enamels are transparent, and others opaque. Very interesting effects are obtained by the opaque enamels playing into the transparent ones. When a transparent color is painted on first to the background, and the design is covered with opaque color, the effect is quite unique. Some enamels fire at a lower temperature than others, and therefore must be put on last. This knowledge of how long the various colors take to fuse can only be found out by experience.

When copper is used as a foundation the process is a little different to the silver. It is really a sort of double enamelling. The copper must first be "fluxed," which means that it must be painted with perfectly transparent glass, like window-glass, ground, like the others, to powder, and then fired. "Fluxing" prevents the copper showing through and spoiling the color. The colored glass must be

HANDY-BOOK FOR GIRLS

painted on and fired. If very brilliant blue or green is desired, gold or silver foil is spread over the fluxed copper and enamelled. The silver-foil must be pierced with a needle, so that the air may escape, otherwise it would bubble up. Stick the foil to the fluxed copper with a little diluted gum arabic.

When a girl is also a maker of jewelry, she can evolve all kinds of beautiful things. Silver wire may be put on the design with a blow-pipe, as in cloisonné. The bold outline and division of the work by means of the wire adds to its beauty and strength very considerably.

Many makers of jewelry go to a good deal of unnecessary trouble in making links and "pulling the wire," but as chains can be bought by the yard and small rings by the dozen, it is really a waste of time. They can be fastened to the solid pieces by means of a blow-pipe, and semi-precious stones, such as amethysts, moonstones, and tourmalines, are effective when the color of the enamel is well chosen, and blister pearls are always beautiful when well set.

When an enameller is working, she should, if possible, be alone, as a person walking about can raise dust, and if it gets into the colors it mars their brilliancy, so it is most important to be very careful about this. If this point is observed, all else that is needed for success in this art is an eye for color and a slight knowledge of drawing. The greatest pleasure lies in making one's own designs, and painting the clear, beautiful colors on those designs. It is delightful to be able to make gifts for one's friends that are one's own creation, and last, but not least, good prices can be obtained for enamelling that amply repay for the time

THE ART OF ENAMELLING

spent in making the enamels and the original outlay for materials.

A very important matter in the successful making of enamels is that too much care cannot be taken in regard to certain details, especially in connection with the treatment of certain metals. Copper, as has been already stated, should be coated with a transparent English flux if transparent colors are to be applied; but when opaque colors are to be used this is not necessary. Copper or gilder's metal should be put for half a minute into a solution of nitric acid and afterward rinsed in cold water and perfectly dried before it is in condition to receive the flux or enamel. Silver can only be cleaned with sulphuric acid, and it is important that the enamel be put on as soon after the cleaning process as possible, when it must immediately be put into a hot fire. If the fire is too slow the metal is apt to oxidize before the enamel melts, preventing the colors from being clear and bright. Another detail that must not be overlooked is that the enamel must be mixed with gum tragacanth when it is applied to the sloping sides, or the enamel will slide off when subjected to the heat of the furnace. Every worker in enamels finds that experience is the best teacher, but there are, of course, certain points which have to be borne in mind constantly. It is not necessary in the early attempts to buy a furnace, as it is possible to heat the enamel by means of a Bunsen burner or a blow-pipe; but if the enamelling is to be taken up seriously, it is best to purchase a furnace.

Chapter XII

HAND-MADE JEWELRY

HAND-MADE jewelry of all kinds has become so popular within the last few years that many women are taking up this handicraft as a means of support. Silver is a favorite medium at this time, and many beautiful necklaces and chains are shown at the handicraft exhibitions from time to time. If good taste is shown in the design and the workmanship is excellent, such work commands a high price. It requires dexterity of handling and a great capacity for taking pains. The simplest form of jewelry-making is quickly learned, and as the student goes more deeply into the craft she is able to work out individual work on characteristic lines. A study of methods and experience in the different kinds of material enables her to express her ideas in this craft. Excellence of hand-work is the foundation of successful jewelry-making.

Material and Tools

A beginner is at first timid at preparing the material herself, and as the silver plate can be bought rolled to the thickness required, it is wiser to begin with the prepared

HAND-MADE JEWELRY

material. Silver wire can be obtained drawn to the required thickness, and this can be ordered by number until the student has sufficient confidence in herself to draw her own wire through a draw-plate.

It is best not to get too many tools to begin with, but to add gradually as the work is further developed. Binding-wire of several gauges, ranging from eighteen to the finest, will be required for tying the work together while being soldered. Crystal borax will be needed, and can be ground up into a fine powder. Sulphuric acid, hydrochloric acid, and nitric acid will all be required for the various pickling solutions. The following is the proportion in which they must be used:

Nitric-acid pickle.....1 part nitric acid, 6 parts water
Hydrochloric-acid pickle.....1 part acid, 8 parts water
Sulphuric-acid pickle.....1 part acid, 6 parts water

Have on hand a pound of boxwood sawdust, which will be required for drying the work after washing. If the sawdust is kept in a tin box, the drying can be accomplished by placing the box on an iron plate, which must be supported over a gas-flame. Take care that the sawdust is not allowed to burn, for fear of staining the work.

The tools necessary to begin with should include: Two chasing-hammers, one heavy and one light; two punches and two chasing-tools; a set of round files; a set of flat files; a set of needle files; a pair of slide pliers; a set of scorpers; snarling-irons; a small cold-chisel; a bench-vise; a joint tool for making hinges; two or three pliers, round and flat; two pairs of cutting-shears, one straight and one

curved; a jeweller's frame-saw and fine piercing-saw; a drill-stock; one or two sizes of mandrils, and graving-tool. A wooden block will be required on which to do the work, also a blow-pipe and some form of spirit-lamp or gas-lamp. These accessories are all that the student will need at first.

Soldering

It is best for the worker to make her own solder, as it is a means of using up old scraps. This is easy after seeing it made by some other craftsman, but she will need to see it made by some one else before she will thoroughly understand how it is done. The solder can be bought prepared, however.

The parts of the metal to be joined must be thoroughly cleansed until they are bright. Now take a lump of borax crystal and grind it up with water. Take a slip of solder and gash it lengthwise; also several slits can be made across it. Immerse it in the borax until it is completely covered by a fine coating of borax. Now take the pieces of metal and paint them over with a solution of borax by means of a camel's-hair brush. The pieces to be joined are now tied together in their proper position by binding-wire. The edges must not be too closely held together, or else the solder when heated will not enter the joint. When the two pieces of metal are fitted and bound with wire, the joint is then moistened with a brush charged with borax solution.

Little chips of solder are then placed at intervals along the joint. It is then warmed in the flame of a blow-pipe and allowed to dry. It is then heated again with a hotter

HAND-MADE JEWELRY

flame, heating it gradually. Only allow the part near the joint to get red-hot. If the work has been brought to the right heat, the solder will run along the joint, filling it in every part. The portion of the metal must not be allowed to cool, or the joint will be imperfect, and the work will have to be cooled and done over again, after first cleaning it with equal parts of hydrochloric acid and water.

Soldering can be done in four ways—with a gas-flame and mouth blow-pipe, on a charcoal fire with fans and small bellows, with foot-bellows and hand blow-pipe, or with an oil-lamp or spirit-lamp.

Making a Ring

A beginner invariably begins on a small piece of jewelry like a ring, as the outlay is small. Jewellers sometimes reject stones which have some slight blemish, but which a craftsman often finds worthy of a good setting, and for practice this opportunity should not be lost sight of. The process is the same for setting a stone in a ring, bracelet, or necklace. Select a stone that is rounded, and which should be well bevelled, so that the setting will hold it firmly in place. Settings may be open or closed, as preferred; a closed setting is really a box, the upper edge of which is rubbed over the stone. The open setting is sometimes only a rim without a bottom. To make a ring of this kind a band of silver must be cut from No. 5 or 6 metal gauge. Cut this a little higher than the intended setting, to allow for filing level and rubbing over. Now bend the strip and fit it closely around the stone. When this is done the super-

HANDY-BOOK FOR GIRLS

fluous metal must be cut off and the ends fitted together. Then tie round the setting some fine binding-wire, making sure that the ends meet, and make a neat joint. Now take the borax brush and paint the joint; take some solder, dip it in the borax, and lay it on the joint. Then warm the setting in the flame, and when the borax has ceased boiling direct the tip of the blue flame on the joint of the setting, which will make the solder run into it. Now let the setting cool and tap it with a light hammer, after having placed it first on a tapered steel mandril. Now take a piece of silver, No. 6 or 8. The choice may be decided according to the use to which it is intended to put the setting. Cut it a little larger all round than the setting, and scrape the surface clean. Tie the setting on firmly with binding-wire and cover the surface with borax, as before. When the joint is nicely set, file off the superfluous metal, and you will have a box which will just take the stone.

This is the simplest form of setting and the safest, but the present fashion is more in favor of the open back. The metal must now be rubbed over the setting and the edges filed. Settings can be grouped together and united by filigree-work when making pins, clasps, or necklaces. To make an open setting take a thick strip of metal, 10 gauge, and bend it a little smaller than the stone, and solder. Now take a sharp graving-tool, and, after wetting the point, cut away the metal inside the top edge, so as to leave a ledge part of the way down in which the stone must fit. Take a small file and shape the setting into leaves or claws, first blocking the main forms. Care must be taken to leave enough metal at the top to hold the stone. The outer sur-

HAND-MADE JEWELRY

face of the ornament may be carved with the round gravers to whatever shape is desired. Too much care cannot be taken in securing the stone firmly in its place.

Necklaces

Necklaces should be planned on a circle about four and a half inches in diameter, and all pendants should be arranged on radial lines to insure their hanging properly when worn. Having first made the design for the necklace on paper, have ready your mounted settings and some flattened wire or rolled twist; then proceed to coil up links from the flattened wire to follow the lines of the design. The link is best made by taking a piece of flattened wire which has had the edge rounded off by the file. Now take a strip of thin paper and wrap it spirally round the mandril, securing it at each end by a few turns of binding-wire. Then take the wire, which may be simple or compound, and fix the mandril in a hand-vise. Coil the wire spirally round the mandril closely and regularly, until as much wire has been used as will be required. Now heat it with a blow-pipe until the paper round the mandril is charred away, when it will be found that the mandril can be drawn from the coil, which would have been impossible had not the paper been used. From this spiral cut off the links lengthwise, keeping the cut as clean as possible. Some twelve or thirteen links, according to the length of the wire, should now be cut off. Again coil another piece of wire on a slightly larger mandril, and saw these parts in a like manner. Then loop them together in such lengths as will be needed,



Fig. 1

connecting the various features of the necklace, after which each link must be soldered separately, using what is called a mop to solder them on, always confining the heat to the particular link that is being soldered.

A ready-made chain known as a Venetian chain can be bought if the student cares to introduce two kinds of links into her work.

It will be seen by the foregoing directions that jewelry-

HAND-MADE JEWELRY

making consists principally in soldering links and setting stones. When this is done in a good and workman-like manner, the beauty of the design will be greatly enhanced. Such work as is shown in Fig. 1 is done to-day by women who are earning a good living by working jewelry. Lessons are given at some of the art schools. Another practical way of becoming proficient in the art is to go into the studio of a skilled craftsman and do the work under his direction. One or two lessons will suffice to teach the student the use of the tools and the methods of workmanship, but each worker must work out for herself her own methods, and must make her own designs, if she hopes to become an original and much-sought-after maker and designer of jewelry.

Chapter XIII

BLOCK-PRINTING

OF late years there has been a great revival of some of the ancient handicrafts, especially in regard to the printing of fabrics. Batik and block-printing are some of the processes that have been brought from oblivion, and craft-workers are getting most interesting results from their experiments in the various methods of color printing. At one time almost all figured fabrics were printed by means of a block-print. The Hindoos and Japanese were especially gifted in printing designs of many colors. Their methods were introduced into Europe about the seventeenth century, and although this primitive method of printing with a hand-block has been given up in favor of printing by machinery, there are still fabrics being colored by means of blocks. Some of the most expensive wall-papers, called hand-made, still have their pattern impressed by means of the block. The effect is so much more beautiful than ordinary printing that there are always people who are willing to pay higher prices for the hand-printed fabrics and wall-papers.

The process evolved by craft-workers of to-day is somewhat different from that used commercially. Each color

BLOCK-PRINTING

requires a separate block cut from fine, close-grained wood. Holly, boxwood, maple, or basswood are all utilized for the making of blocks. When small patterns are required, an easy method of procuring them is to buy a box of child's building-blocks which are of maple and made in square and oblong shapes. They are an inch and a half in thickness, so that they lend themselves admirably to block-printing.

There is a charm about a block-printed fabric that appeals to all those of artistic temperament. A block-printed fabric has very much the same appearance as a piece of material that is stencilled. It presents a more iridescent and cloudy appearance, and has not the even symmetry of a stencilled fabric. It is specially adapted to small geometrical patterns, and has the advantage when a light color is to be printed on a dark one.

The Preparation of the Block

Block-printing is done in the following manner: First procure the block, a little larger than the pattern, and sand-paper it on both sides. Take some Japanese tracing-paper and paste it with library paste on the block, and then draw, or trace, the design. Shade the background with the pencil, so that the pattern stands out clearly, and then proceed to cut out the background with either a Sloyd or pen knife. Some craft-workers claim that they require wood-carving tools, but beautifully carved blocks have been done with the thirty-five-cent Sloyd knife. While the block is being carved, it is best to hold it on the table by means of cleats.

HANDY-BOOK FOR GIRLS

Some workers find it easier to hold the block in the palm of the left hand. The blocks of different workers vary considerably in appearance. Some are deeply indented, while others have only a slight depression. Figs. 1 and 2 are excellent examples of artistic block designs.

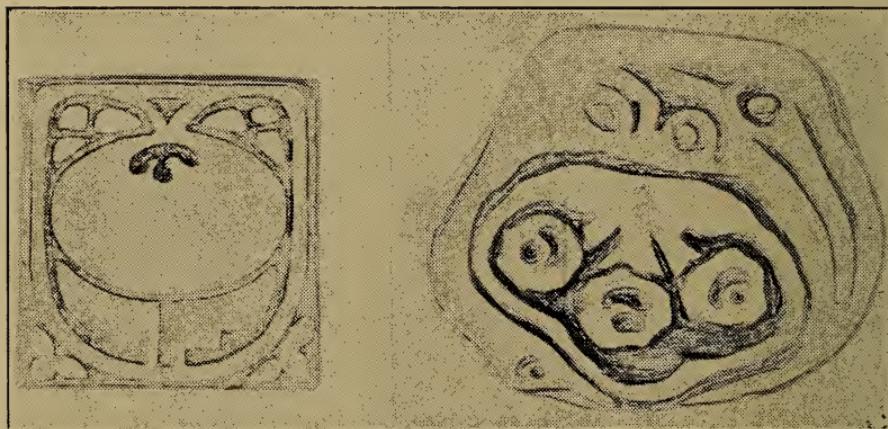


Fig. 1

Fig. 2

The work is not difficult to do, but it requires care. Lines should be cut vertically directly on the outline of the design. Unless great care is taken a chip may inadvertently be broken off, and a new block will have to be made.

The Colors

The color for printing must now be prepared. Oil-colors or dyes are generally used; oil-color is the best medium, as there is no difficulty about its being fast. Take a tube and squeeze some paint onto a saucer or palette. Mix a little

BLOCK-PRINTING

turpentine with it until the color is as thick as cream. A few drops of mucilage must then be added to keep the color from spreading when it is applied to the fabric. Make a pad of cheese-cloth of several thicknesses and place it in a saucer, and then take the diluted pigment and lay it over the pad with a paint-brush until the pad has thoroughly absorbed the color. In order to know if there is enough color on the pad, turn it upside down and let any superfluous color drop off. Great care about this detail is the secret of good block-printing.

A new block is not at first suitable for printing. In order to get it into good working shape, press the carved side of the block on the pad, wipe off the color with a rag, repeating the process several times until all the pores of the new wood are completely filled; then polish with a soft cloth, and the block will be in perfect working order.

The Printing

There is a wide range of materials suitable for printing. Unbleached muslin, linen, cheese-cloth, pongee silks, denim, and mummy-cloth are all favorites with block-printers. As unbleached muslin is inexpensive and easy to print, it is a good choice for the beginner. Mummy-cloth is particularly well adapted to the process (see Fig. 3). The material must be stretched taut on a rough table or board, and creased and measured to show where the pattern may come to, or a row of pins can be placed as a guide for the block. When once the color is applied it cannot be changed,



Fig. 3

so that it is most important to have the exact place indicated where the printing must be done. Then proceed to press the block face downward on the material. This will leave a delicate imprint. If a strong impression is preferred, the back of the block must be hammered with a

BLOCK-PRINTING

wooden mallet. The harder the blow, the darker the print. Great care must be taken to make each succeeding impression as light or as heavy as its predecessor, although a certain amount of variation is permissible. The printing is most interesting to do, and block-printers become most en-

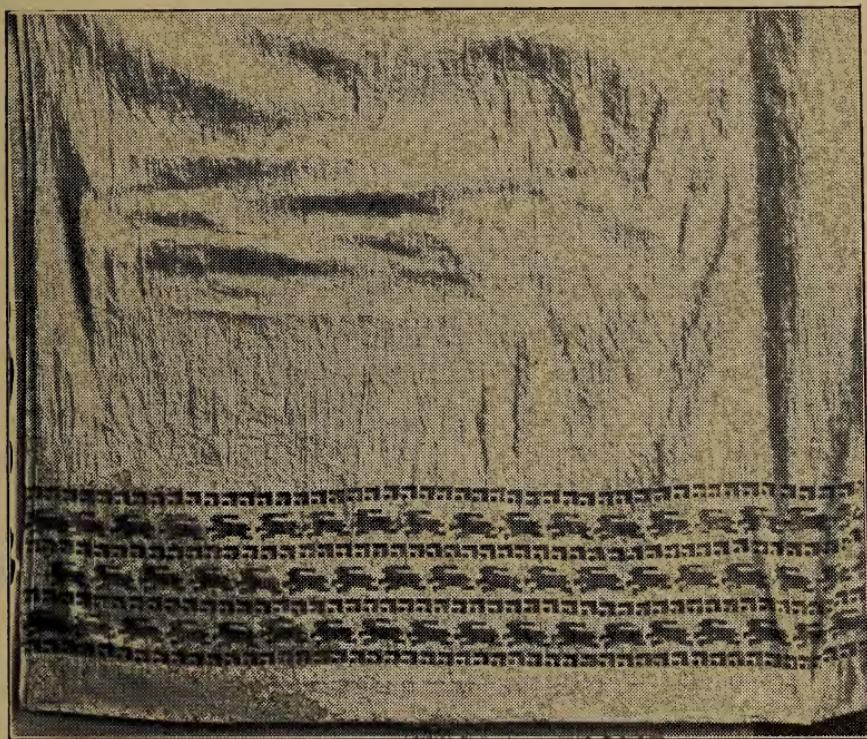


Fig. 4

thusiastic over their craft, and the work goes so rapidly that a great many yards of block-printing can be done in three hours.

HANDY-BOOK FOR GIRLS

Each block-printer finds out new methods, but as a rule they find that thin fabrics require clear colors a little darker than the background, while dark materials can be printed with opaque colors. The cloudy, iridescent appearance of block-printing is one of its chief charms.

Block-printing need not be confined to ornamenting fabrics, as it may be used for wood, leather, or paper. It is particularly well suited for decorating the inside of book-covers, and many bookbinders combine the art of block-printing with that of tooling leather, in order to have their books appropriately decorated.

A small geometrical border is particularly well suited for table-covers, curtains, bureau and sideboard covers. The latter may either be ornamented in the same way or have a deep design printed on each end. A curtain or portière (Fig. 4) may be decorated with the border design at the side and across the bottom, or an all-over design covering the entire fabric.

Chapter XIV

STENCIL-WORK

THERE are many ways of rendering home attractive, but there is one way of especially beautifying it, and that is by the aid of stencil-work.

The art of stencilling reaches far and wide. It is as old as the ancients and as modern as ourselves. It is so interestingly simple in treatment that if one be artistic in ideas and clever enough to originate one's own designs, the interior of one's home can be turned into the most enchantingly exclusive place in town.

Borders and centres can be stencilled on burlap, velours, cloth, silk, cotton goods, leather, crex grass-cloth, and made into portières, table-pieces, sofa-covers, screens, mats, or rugs. Sofa-cushions with stencilled college flags, yacht flags, coats of arms, give a certain tone of jollity to any sombre-looking study.

Take, for instance, the wood panels in the living-room. How decorative they would be with some odd design in one or two colors, running lengthwise, or just a simple green border on the dull oak. The children's room would look more cheerful with a gayly colored frieze and a touch of color in the écrù or white curtains. The bedroom would

HANDY-BOOK FOR GIRLS

take on a festive air with some dainty design stencilled on the bedspread, the bureau-cover, and the foot-rug. For ornament there is nothing more effective than the large terra-cotta pottery, with a design or a figure or two stencilled in black and red. You would give to it a novel touch all your own which could not be bought in any shop.

The more personality you impart to your surroundings the more charming those surroundings will become to you and to those interested in you. There need not be an abode in town as individual as your own, and there is nothing that appeals more to a tired business man in his home than a cozy touch of individual daintiness, which is the great panacea for the "commonplaces" of outside existence.

The possibilities of stencil-work for fancy-dress parties and amateur theatricals are unlimited, as any one who has the slightest spark of ingenuity will readily perceive.

What fun an Indian party would be! The blue, red, green, or yellow patterns of the Navajo blankets could be stencilled on ordinary khaki, and I assure you they would present a very gorgeous array. A butterfly-party would allow a vast scope for color. There are so many butterflies—the large and small, the motley colored, those with spikes which protrude so fascinatingly, and the little, simple, black, yellow, and blue ones. Great big black butterflies stencilled on a yellow cambric or on an organdie gown would be most bewitching, and as for yellow, blue, gold, or silver butterflies on a black organdie, why, such a costume, with care and taste, could easily reach the pinnacle of exquisite-

STENCIL-WORK

ness! Figs. 1 and 2 are simple but effective designs. Fig. 3 is for work in two colors.

The Outfit

The stencilling outfit is inexpensive, and therefore can be made to meet the requirements of any small purse. There



Fig. 1



Fig. 2



Fig. 3

HANDY-BOOK FOR GIRLS

are various kinds of stencils. Stencils may be simple, in single form for one color. There is also the stencil cut for two or more colors. The double stencil has two parts to each stencil, and the complicated stencil is made to take several colors.

Stencil Cutting

1. Procure a heavy quality of Manila paper, and thereon make your design; coat it with linseed oil, and allow it to dry.

2. Lay a square of soft cloth on the table. On it place a piece of plate glass; eighteen by eighteen inches is a handy size.

3. Place the dry paper on the glass, and start to cut it, bearing in mind the following points: (a) not to cut the lines any longer than the drawing shows, or the stencil will be materially weakened; (b) that the cutting is a wrist movement, therefore you should hold the knife just as loosely as you would a pencil, using the point only. When possible, cut each curved line with one sweep of the knife and all straight lines without a ruler.

4. When the stencil is finished, coat it on both sides with shellac, a process which will stiffen the pattern, at the same time adding to its durability, and permitting of its being washed with cold water when the stencil is stained.

The stencil-knife generally used is about five inches long. It is composed of a wooden handle with a slit, in which you place the steel blade, and there is a brass ferrule to hold the combination in place. The paint used is the ordinary oil paint in tubes. The brushes, paper, oil, and shellac are to be bought at any shop where artists' supplies are sold.

STENCIL-WORK

As to the plate glass, ask the glazier for a piece of broken or scratched window-pane, which will serve the purpose admirably.

The Process

For stencilling the pattern on the material:

1. Lay the material on the kitchen table or on a drawing-board, and with small pins secure the stencil in place.
2. Prepare the color on a glass slab, bearing in mind that, should you be working on light-colored material, you must thin the transparent paint with turpentine or gasoline, whereas, for instance, should the material be a dark velours, it is necessary to mix white with the paint to enable the color to show on the dark background.
3. Fill well the stencil-brush with color, yet not allowing an overflow. Then experiment with the brush on a piece of paper, to see if the paint be well worked into it. If not overcharged with color, proceed to rub the brush over the stencil with a light, circular motion until each opening is well and evenly covered with color.
4. Remove the pins and carefully lift the stencil. If using a two-colored stencil prepare the next tone, and, when the first color has dried, proceed as before.

Some Suggestive Designs

The designs here shown were developed on the popular cotton crêpe, which may be purchased from twelve and a half cents up, in white or delicate colors, at any of the dry-goods stores.

HANDY-BOOK FOR GIRLS

The material is particularly suitable for this purpose, as its soft wrinkled surface takes the paint beautifully; and as it requires no starch or ironing, it is only the work of a few minutes to rinse them out as often as is necessary, for perfect freshness is essential. They would be equally pleasing developed on scrim, cheese-cloth, or unbleached muslin—the last named is effective and hangs well, but is more difficult to launder.

Fig. 4 illustrates a particularly attractive scarf. The dimensions may, of course, be varied, but eighteen by forty-five inches is a standard size to choose for a table.

In this instance two shades of blue were the colors chosen, the central fleur-de-lis form being tinted quite dark, the rest lighter. The small, spear-like figures on the sides are repeated till they nearly meet one another, and in the centre of the scarf an extremely pretty oblong design is formed by placing two of the large figures end to end. This does not appear in the cut, but is particularly effective. Shade the little spears with the dark blue. Hem and finish with white cotton fringe.

Fig. 5 shows how nicely the same stencils may be adapted to decorate a pillow. Fold the material in quarters and crease, stick a pin through the centre of the stencil-marker into the centre of the goods, and repeat four times at right angles, as shown, arranging the border separately according to the size desired. Tint some bits of the same material in the prevailing color, and cover four big button-moulds as a finish for the corners. Arrange the back in two parts with buttons and buttonholes so that the pillow may readily be removed for laundering; sew up and turn; push the



Fig. 4



Fig. 5

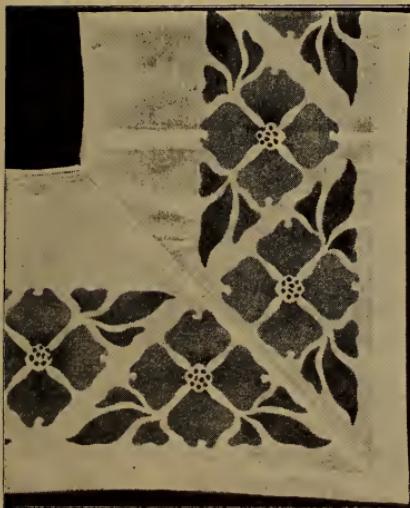


Fig. 6



Fig. 7

STENCIL DESIGNS

four corners in, draw the edges together, and sew the buttons in place.

The dogwood design is a very effective one, and extremely adaptable, as the triangular blocks may be fitted together in an infinite variety of ways.

Fig. 6 is a suggestion for a bedspread, which would be charming made of the crépe joined together with strips of narrow Cluny insertion. The full width could be used for the centre, bordered with two or more bands (according to the size desired) mitred at the corners and joined together with insertion. Finish the outer band with wide hem or lace edge. Arrange the dogwood design as shown, forming a border all around, or arrange in groups at the corners and sides—the latter arrangement would be more simple, as it would make careful calculation as to the repeat unnecessary. An oblong block of the same design would be very effective tinted in the centre, using eight or more repeats according to the size desired.

Fig. 7 shows the same design arranged on a scarf, the ends finished with a wide hem instead of the fringe. In the example shown the flowers were tinted in a very dull light catawba and the leaves in olive-green. Another pretty combination would be a more conventional one, dull yellow flowers and brown leaves, touched with green at the tips if desired. The centre of the flower may be made a third color or the same tone as the leaves.

To avoid any danger of smearing one part of the design with the color of another, have several pieces of smooth cardboard on hand to lay over the unused openings, holding it in place with the irons or the fingers while tinting.

STENCIL-WORK

The alder design here illustrated (Fig. 8) was developed in brown with dull yellow pendants. The diamond-shaped dots on the pendants should be tinted in burnt sienna or the olive-brown of the stems. These dots require a second

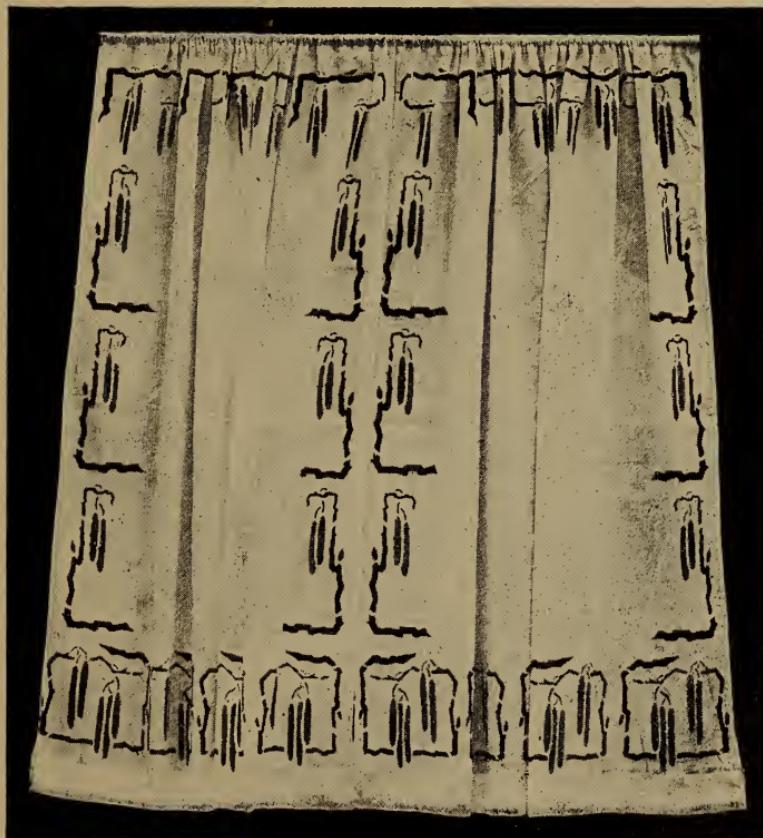


Fig. 8

stencil, which is so arranged that it may very readily be fitted on after the rest of the design is finished.

In this instance three separate *motifs* were used for the

HANDY-BOOK FOR GIRLS

bottom, top, and sides, giving the all-around-border effect so generally used in France; while the effect is excellent, it would probably be better for the novice to be content to choose only one *motif*, repeating it all around, or at bottom and sides. Be very careful about getting your spacing even before commencing work, and, having ascertained the centre of each space, place the notches of the stencil pattern on it.

Chapter XV

CLAY-MODELLING AND PLASTER-CASTING

THE girl on whom nature has bestowed the natural talent and liking for art-work will find clay-modelling a fascinating and pleasing branch to follow.

To become an expert modeller, and finally a sculptor, requires years of patience and perseverance, but to copy simple objects in clay is not a difficult matter, and with some clay, a few tools, and the skeletons, or supports, the amateur should not meet with any great obstacle if the following descriptions and instructions are accepted and practised.

Very few tools are necessary at the beginning, and Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11, shown in Fig. 1, are a full complement for any beginner. The first four are wire tools, made of spring-steel or brass wire, about which fine wire is wrapped. The ends of the wires are securely bound to the end of a round wooden handle, and sometimes, for convenience, two ends are made fast to a single handle. These tools are called "double-enders," and are used in roughing out the clay in the first stages of the work. No. 5 is a box-wood tool with one serrated edge, and is used for finishing. The tools shown in Nos. 6 and 7 are of steel, and are of use

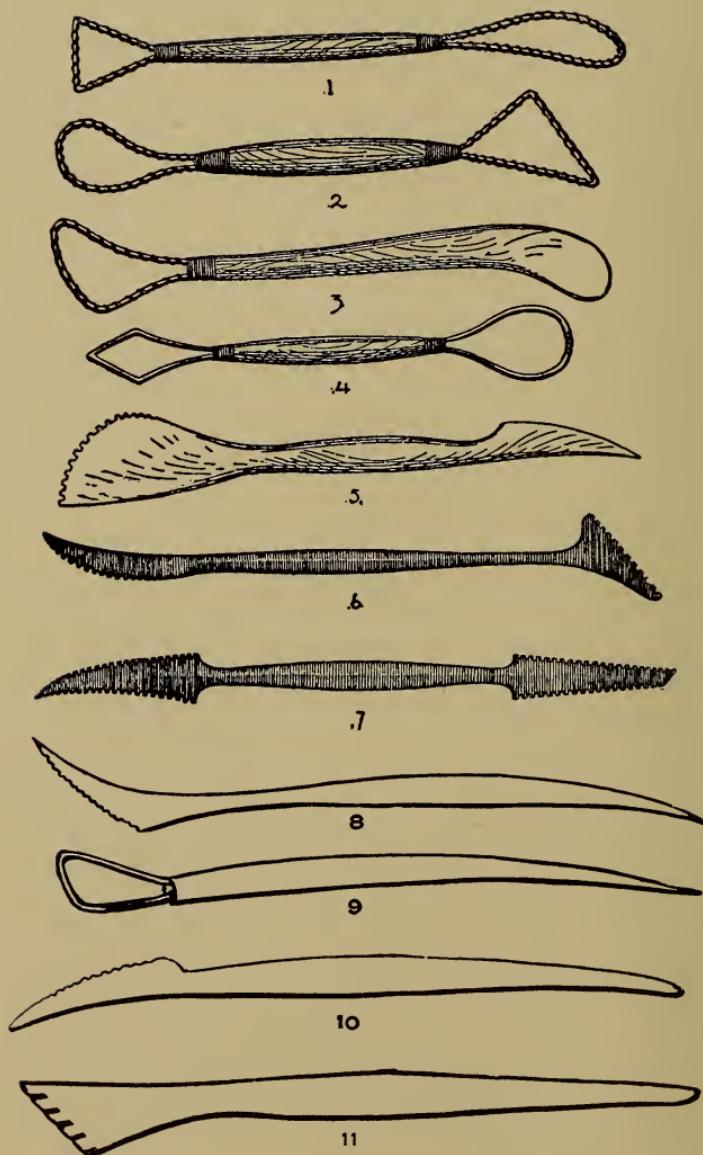


Fig. 1

THE TOOLS

CLAY-MODELLING AND PLASTER-CASTING

on plaster, where others would not be sufficiently durable. Nos. 8, 9, 10, and 11 are boxwood tools, a wire loop being fastened in the end of No. 9. Any of these tools can be purchased at an art-material store for a few cents each, except the steel tools, which are more expensive.

A stand, or pedestal, will be necessary on which to place the clay model, unless perhaps it should be a medallion, which may be worked over on a table.

Fig. 2 is a stand that can be made from a few pieces of pine two inches square and a top board one and a half inches in thickness. It is arranged with a central shaft that may be raised or lowered, and to the top of which a platform is securely attached.

The movable shaft should have some holes bored through it from side to side, through which a small iron pin may be adjusted to hold the platform at a desired height. Clay can be purchased at the art stores by the pound, or in the country a very good quality of light, slate-colored clay may sometimes be found along the edges of brooks or in swampy places where running water has washed away the dirt and gravel, leaving a clear deposit of clay of the consistency of putty.

Supports which the clay models are built upon can be made of wood and wire, as the requirements necessitate. That for the head is shown in Fig. 3. Nearly every clay model of any size will need some support, as clay is heavy and settles, and if not properly supported will soon become distorted and the composition spoiled. You will also need some old soft cloths that can be applied wet to the clay, a pair of calipers, and a small trowel or spatula.

The Technique of the Art

To model well the art of drawing is indispensable. The art of wood-carving is also a valuable one to the clay-modeller, but care must be taken when making any casts of

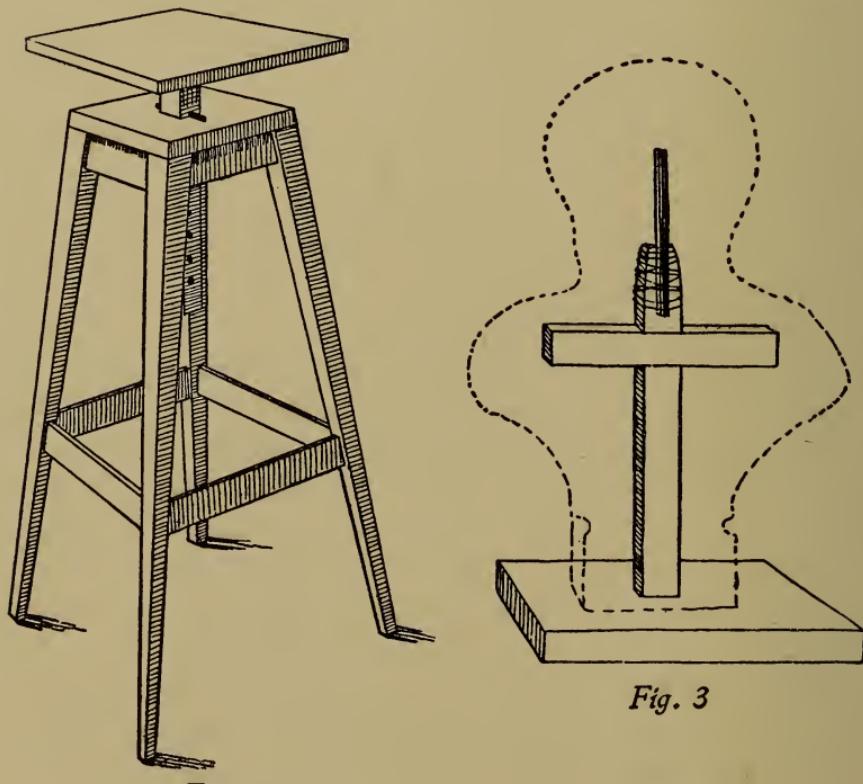


Fig. 3

Fig. 2

wood-carving to use glue moulds; otherwise the carving would become firmly embedded in a plaster mould, due to the undercut in the carved ornament. To begin with, choose some simple object to copy, such as a vase or some

CLAY-MODELLING AND PLASTER-CASTING

small ornament; then, when a satisfactory result has been obtained, select something a trifle more difficult, such as a hand or foot.

When copying a head, obtain a bust-support on which to work the clay. A very simple and strong one can be made from a piece of board, two sticks, and a short piece of pipe wired to the top end of the upright stick (Fig. 3).

To carry out the proportions of a bust similar to Fig. 6, the clay should be packed about the support much after the manner shown in Fig. 4. This will support the clay.

With a lump of clay and the fingers form the general outline, as shown in Fig. 4, for the head; then, with the wire tools, begin to work away the clay in places, so as to follow the lines of the model. With the calipers measurements may be taken from the plaster head and used advantageously in the building up of the clay model. Turn the plaster model and clay copy occasionally, so that all sides may be presented and closely followed in line and detail. Fig. 5 shows the next stage, and Fig. 6 the completed head.

Modelling differs from drawing and painting in that every side of the model is visible, while only the face of the painting is presented to the eye, the impression of form and outline being worked out on a flat surface.

Having successfully mastered the head, next attempt a foot from a plaster cast. Afterward a more elaborate subject, such as a whole figure, can be tried.

With the wire modelling-tools and the fingers begin to work away the clay to obtain the general outline and form; continue this in a rough manner, until a perfect composi-

HANDY-BOOK FOR GIRLS

tion is obtained that compares favorably with the original model; the finishing-touches may then be applied, and the detail worked up more carefully.

Never complete one part and leave the remaining ones until later; always work up the model uniformly, adding



FIG. 4



FIG. 5

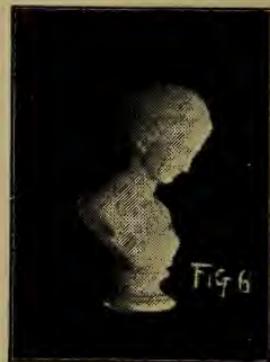


FIG. 6



FIG. 7



FIG. 8

a little here and there, or taking away, as may be necessary, and so developing the whole composition gradually.

Moisten the clay occasionally with water sprayed on with a small watering-pot or a greenhouse sprinkler, to

CLAY-MODELLING AND PLASTER-CASTING

keep it soft and ductile. When not being worked upon it should be covered with wet cloths, to keep it moist.

As the work progresses the clay may be allowed to harden and consolidate, but not to dry; if allowed to dry entirely the model may be considered ruined, as the shrinkage of the clay around the support results in fissures and fractures that cannot be repaired.

By the time the amateur has acquired the knowledge to attempt a full-size figure he will be able to invent the devices to support it.

The support, or skeleton, must of course be adapted to line with the pose of the figure, and should be of pipe and heavy wire or rods securely anchored to the base-plate.

The composition of flowers, fruit, foliage, animal life, and landscape is an inexhaustible one, and some beautiful effects can be had in flat-work. Good examples of this character of work may be found on all sides, and to the genius the field of modelling is a broad one—without limit.

Glue and Gelatine Moulds

When casting from hands, feet, or ornaments where undercut predominates, the most successful mode is in the use of gelatine or glue.

To cast a head similar to the one shown in Fig. 6 it will be necessary to make a box frame large enough to hold the head.

The cast is to be well oiled, and down the front and back, running around under and back over the base block, strong

linen threads are to be stuck on with oil. Warm glue or gelatine is then poured in the box and left to chill and solidify.

When sufficiently cold the frame may be removed, leaving the solid block of glue like hard jelly; then the ends of the threads are to be grasped and torn through the gelatine, thus separating it in two or three parts. The plaster head may then be removed, and the mould put together again and surrounded by the frame to hold it in place.

To make a plaster head this plaster of Paris may be poured into the mould and left for a while, when, on removing the frame and taking the glue mould away, a perfect reproduction of the original head will be found.

Modelling a Foot

To model a foot from a plaster cast, as shown in Fig. 7, it will be necessary to lay or putty up the form in the rough, as suggested for the bust in Fig. 4. Now rough out the form with the modelling-tools, so that it will appear as shown in Fig. 8. A frame, or support, should be made from a block and a stout piece of wire, as shown in Fig. 9, so that the mass of clay, particularly that at the back of the foot, will not settle.

For full-length figures it is always necessary to construct a frame after a rough front and profile drawing has been made. With this drawing in sight, it will then be a comparatively simple matter to construct a wire or iron pipe frame such as that pictured in Fig. 10.

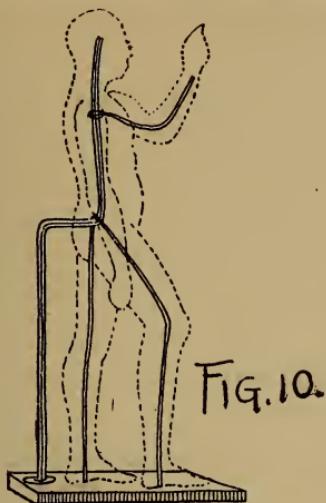


FIG. 10.

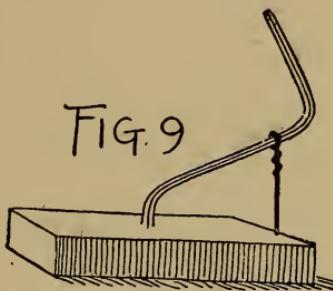


FIG. 9

Bas-Relief Modelling

Bas-relief work is another interesting department of clay-modelling. This is one-sided in its effect, and the full, rounded appearance of the statue or bust is reduced to a more flattened form with lower relief. A familiar example of bas-relief is the head on a silver dollar, or the raised ornament on silverware and pottery. Let us now begin with the group of pears and leaves illustrated in Fig. 11.

A small block or piece of wood is treated to a coat of shellac or paint; then the clay is puttied on to roughly form the parts in the group. With the modelling-tools the outline and form is gradually worked out; then the surfaces are smoothed down, and the few little artistic touches given here and there to lend life and character.

Bas-reliefs can, of course, be cast any size, and from the

original plaster mould many duplicates in composition or *papier-maché* may be made.

Garlands, festoons, sunbursts, panel ornaments, and cartouches can be modelled in clay, and afterward cast for architectural features in interior decoration. A good example of the garland is shown in Fig. 12.

A Medallion Head

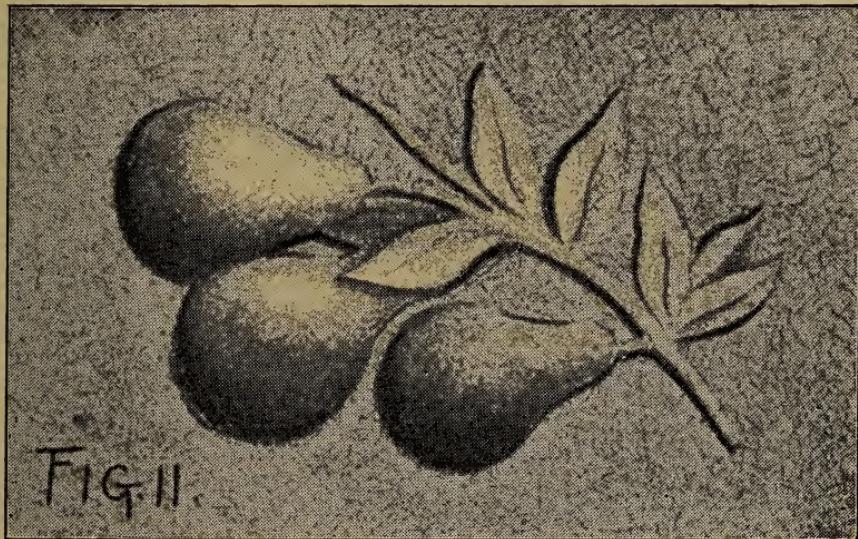
After some experience in casting ornaments in bas-relief has been obtained, it would be well to try a head or bust. A simple method of doing this is to take an ordinary school slate and make the outline of a head on it. Within this outline you build up roughly with your finger and thumb a cake of clay about half an inch in thickness; then with your modelling instruments work it up as accurately as your artistic skill will permit (see Fig. 13).

When in the progress of your work you find it necessary to leave it for a short time, be careful to cover it over with a wet cloth, and if for a long time, put two wet cloths over it, and cover them in turn with a sheet of newspaper. This is necessary to keep the clay from getting hard and unfit for working. If at any time you find the clay getting too stiff, sprinkle it with water shaken from a whisk-broom. To make the moulds of your clay model you will require a little plaster of Paris, some lard oil, and some soap, and then your outfit is complete.

When your clay medallion is finished, build a wall of clay around it of about an inch and a quarter in height, as shown in Fig. 13; then get a teacupful of lard or olive oil, and

CLAY-MODELLING AND PLASTER-CASTING

add to it a good teaspoonful of any kind of soap scraped fine. Put this on the stove and stir until it is thoroughly mixed; then with a soft camel's-hair brush lay a slight coat over your entire work.



HANDY-BOOK FOR GIRLS

You must now mix your plaster. If the surface of your medallion is, say, one foot by six inches, you will require about two pounds of plaster to about a quart of water. Sprinkle the plaster into the water, and then watch it until bubbles have ceased to come to the surface. When no more bubbles appear, stir it up well with a stick. The mixture should be about the consistency of thick cream. The exact proportions you must find out by experiment. This plaster cream you pour quickly over your medallion, blowing gently with your mouth on the fluid as it spreads itself over the face of your work; this is to prevent the formation of bubbles. In a short time the plaster will become hard; you then remove your clay wall, and lift the plaster mould, or matrix, from the clay. This you do by passing a penknife all round between the plaster and the slate, after which it lifts easily. You have now a perfect plaster mould. If you find any small particles of clay adhering to it, wash them off with a soft camel's-hair brush and water.

You now want to get a plaster cast from your matrix. To do this you lay a coat of the soap-and-oil mixture with a camel's-hair brush all over the face of the mould, and then pour in the plaster just as you did before, taking the same precautions to blow upon the plaster and to build a wall of clay around the mould.

You let this stand for half an hour until it is perfectly set, when you can remove your casting by passing a thin-bladed knife all round between the matrix and the casting. If it does not then lift easily, plunge the whole thing in water for an instant, after which you will have no difficulty in separating the two parts.

CLAY-MODELLING AND PLASTER-CASTING

You now have a plaster cast of your original work, which you can touch up and finish off with sand-paper, or with the blade of a penknife if necessary.

You can, of course, make as many casts as you please from your mould, and thus have very pretty little souvenirs to present to your friends.

Coin and Metal Casts

This same procedure may be employed when making moulds and casts from coins, medals, and medallions. A narrow frame is made of wood, and at the middle of this a medal is placed on the flat oiled surface of a board, a slate, or a piece of marble, as shown in Fig. 14. The face of the object is now prepared with the oil, and the plaster is poured as previously described. If any number of reproductions are to be cast from the mould, it would be well to give it one or two coats of thin shellac; then oil it before each cast is made.

Plaster-Casting in General

It is not a difficult matter to reproduce in plaster almost any object that has no undercut or parts that will not easily detach from a mould. When making them, the first thing to do is to get a piece of board about a foot square; that is to work on, so as not to soil the table. Then you want a lump of clay about as big as a football, five or six pounds of plaster of Paris—it only costs three cents a pound—and a half-dozen wooden pegs. You also want a cup of warm,

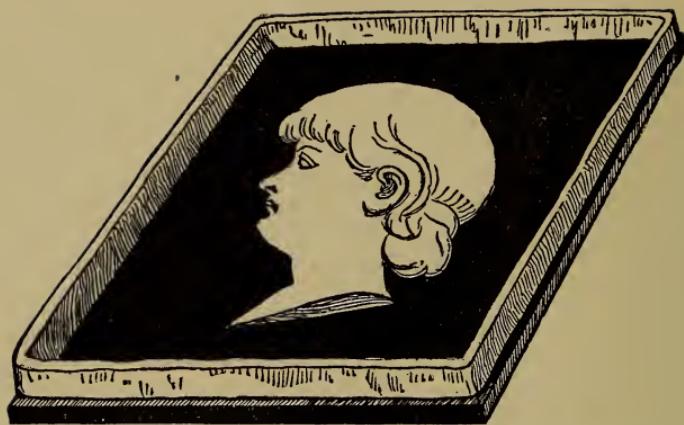


Fig. 13

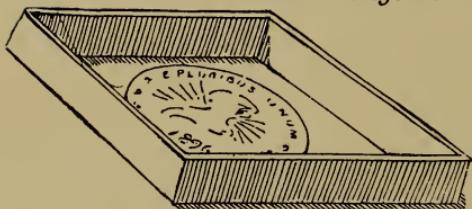


Fig. 14

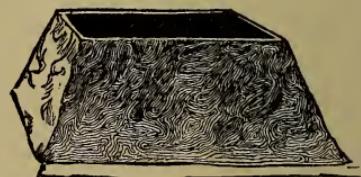


Fig. 16

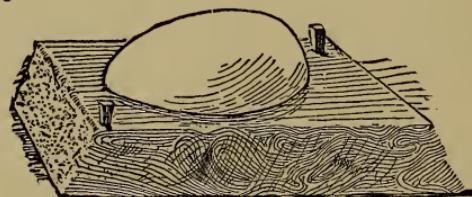


Fig. 15

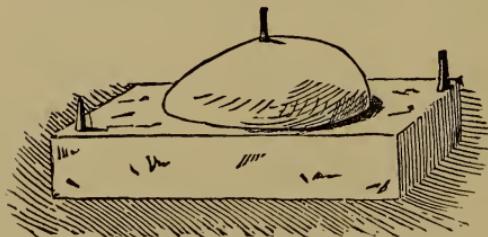


Fig. 17

MEDALLION AND PLAIN CASTING

CLAY-MODELLING AND PLASTER-CASTING

melted lard, or Castile soap dissolved in hot water, to rub over what you are going to copy, so as to prevent the plaster sticking to it.

Now, suppose it is an egg you want to copy. You rub it all over with your melted lard, and lay it down on the piece of board. Pack clay around it as high up as the middle of the egg, and as far out as half an inch from the widest part. You must be particular about not putting clay higher than the middle, because, if you get the clay too high, you can't get the egg out without breaking the mould.

When you have the clay around the lower half of the model, smooth and level it, and push two pegs in opposite corners, as shown in Fig. 15. Now around the whole thing make a box or case of clay, with sides rising half an inch higher than the model (Fig. 16). Mix plaster of Paris and water together till you have it like molasses on a warm day; pour that into the clay box, so that the model is covered and the mixture even with the top of the box.

The plaster will set, or become hard, in a little while, and you then tear the box away and take out the model and plaster together, leaving the first clay mould. Next put the plaster mould and model in a clay box just as you did before, and pour plaster over it, first greasing the model and upper surface of the mould. Before pouring on the plaster, roll a small piece of clay in your fingers, and put it on the model (Fig. 17), so that when you pour plaster over it a hole will be left in it through which you may pour plaster for the final cast.

For the second time tear away the clay box and gently separate the two parts of plaster of Paris; take the model

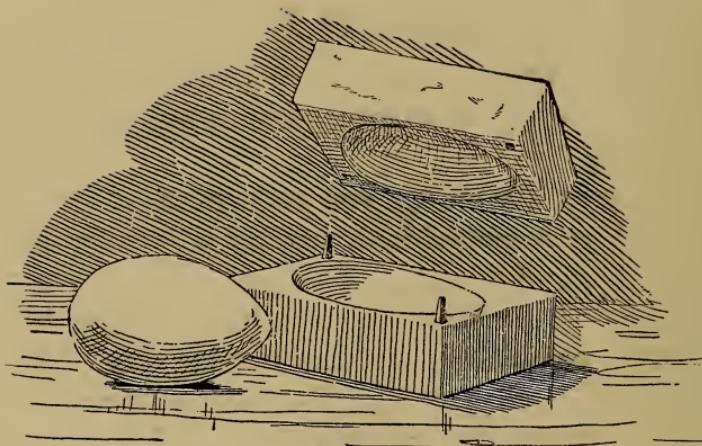


Fig. 18

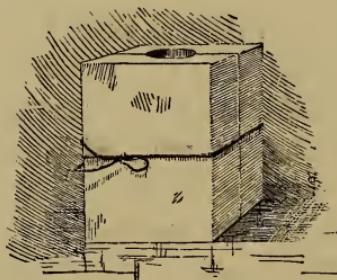


Fig. 20

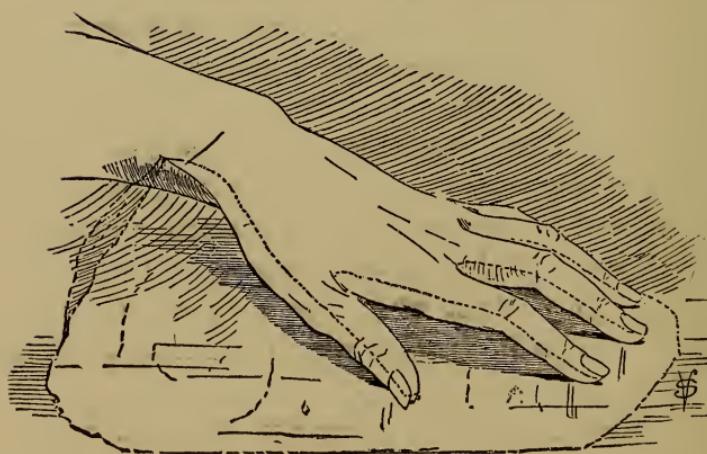


Fig. 19

PLASTER CASTING IN GENERAL

CLAY-MODELLING AND PLASTER-CASTING

out, and you will have two blocks of plaster, which, when brought together, will contain an exact mould of the model (Fig. 18), and one block will have an opening in it through which you can pour plaster. Before pouring in the plaster, however, be sure to grease the insides of the mould. Then put the parts together, using the pegs and holes as guides to a proper fitting, and tie firmly with a piece of twine. Now pour the plaster in, and then shake the mould gently in order to make the mixture settle in all the smaller crevices.

Of course, when you separate the parts of the mould now you will have a perfect cast of your model. It will have a thin ridge running around it where the mould was joined, but that is easily rubbed off with sand-paper.

Making a Casting of a Hand

In a mould made from a hand you proceed in about the same way. The great thing is to find the dividing line in the model—that is, the place where the parts of the mould ought to join. In the egg it is easy enough, for you can divide it into two equal parts; but you take a hand, and you have to make the line around each finger just where it is broadest (Fig. 19), and build the clay up to that line. The wrist-hole in a hand-mould makes a good hole to pour the plaster in (Fig. 20), and, after all, a hand is easy to make.

These simple directions should make it easy for the amateur modeller to acquire the first principles of the art. There are several good compositions in which the young craftsman can work besides plaster of Paris, such as “kiln cement,” “carton-pierre,” “papier-maché,” “plaster compounds,” “artificial marble,” and “concrete.”

Chapter XVI

P Y R O G R A P H Y

PYROGRAPHY, or fire-etching, is by no means a modern art, but one that was practised many centuries ago both in civilized and barbarous countries. In Europe, during the early ages, this work was executed with a poker inserted in the fire and heated red hot; but, as the iron must have cooled quickly, the task of embellishing a panel was a tedious and laborious one.

A knowledge of drawing will be very helpful to the young pyrographer, as the object can be sketched in lead-pencil and followed with the heated iron or platinum-point.

Of the various materials that may be used on which to etch the ornament, wood and leather have been found the most satisfactory, since they retain the deep, rich brown-and-black tones given by the heated iron, and yield more readily under the tool than other materials.

If wood is employed, such as oak, birch, maple, holly, and cherry, it should be selected with a pretty grain and as free from knots as possible; but if leather is used, a good quality of oak-tanned sole-leather will give the best results; although for light work a pleasing effect can be had by employing a stout Suède and etching on the rough side.

PYROGRAPHY

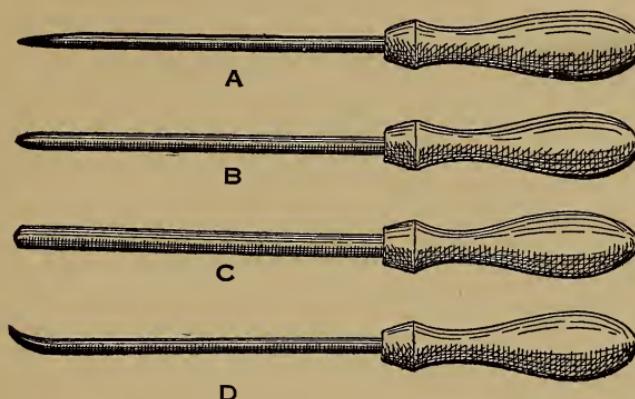


Fig. 1

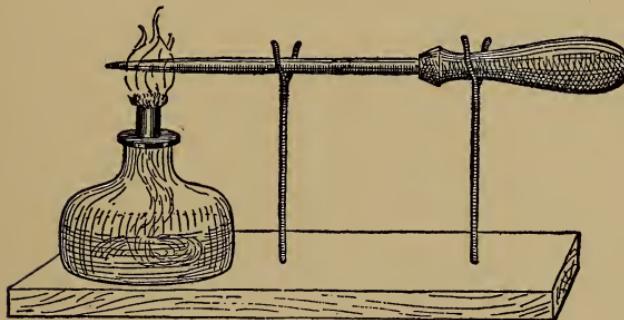


Fig. 2

The Tools

The etching-tools are few and simple, and are shown in the illustrations.

Fig. 1 depicts a set of irons that can be made from pieces of round iron a quarter of an inch in diameter and having the points fashioned with a file. The ends of the irons can be inserted in file-handles that may be purchased at a hardware store for a few cents each.

HANDY-BOOK FOR GIRLS

A is a sharp-pointed iron for outlining; B is a round-pointed one for broader work; C is a stub for bold work, and measures three-eighths of an inch in diameter; D is a curved background tool, and is used for burning in the grounds, or shading, in order to make the design stand out boldly.

With these tools and a spirit-lamp and rest, such as is shown in Fig. 2, some very good work can be done; and to complete the set a sharp-edged eraser may be added to scrape away the wood, if perchance it should have been touched by mistake with a hot iron.

The Method of Working

To begin with, it is best to carry out a simple design—to decorate a panel, a drawer front, or the sides to a small wooden box. The pattern must first be drawn out in full size on a piece of smooth, brown paper, and then transferred to the face of the wood by the use of colored or black transfer-paper, sheets of which can be had at an art or stationery store for a few cents each.

To reproduce the design, lay the transfer-paper face down on the wood, and over it the drawing, face up; pin it fast, and go over all the lines with a lead-pencil, bearing down to impress them on the face of the wood. Having gone over all the lines, unpin one corner and raise both sheets of paper to see that the impression is good. If not, replace the paper and redraw the faint or unmarked lines.

Fig. 3 is a simple and attractive design for the embellish-

PYROGRAPHY

ment of a panel, of a small drawer, or as one of the sides of a box.

If the tools shown in Fig. 1 are used, fill the spirit-lamp half full of alcohol and light it, then place the pointed iron A on the rest in such a position that the point will be enveloped by the blue flame, where, after remaining a minute, it will become red hot. Remove it and trace the lines in the wood with the hot point until all of them have been gone over, and as a result the wood will have the appearance of Fig. 4. The iron will necessarily require reheating continually, and to save time it would be well to have two or three irons of each shape, as they cost but a few cents, and are easy to make.

After the outlining has been done, the background should be burned in with the curved iron D. Fig. 5 illustrates the manner in which this may be accomplished; the left side is partly finished, and shows the simple and effective mode of lining or "dragging" the ground. The right side is a finished ground, where the cross-strokes may be seen with an occasional oblique stroke to lend added density. It is not always possible to complete a ground until the ornament is shaded, and what may seem to be a finished background before the shading will sometimes afterward prove too weak or flat, and will necessarily require going over in places to strengthen and darken it.

Fig. 6 is a piece of finished work where the ornament is shaded to give it character, and where also the background has been retouched in some places to give it a stronger feeling. This illustration is a good example of pyrography, and gives the relative tones of high light and shadow.

Experimental Work

Before beginning on an ornamental piece of work, it would be well to practise on clear pine or white-wood, and to become dexterous in the use and manipulation of the tools, and to find the ones best adapted to certain kinds of work.

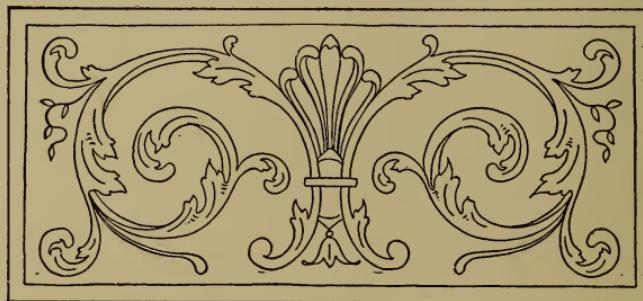


Fig. 3

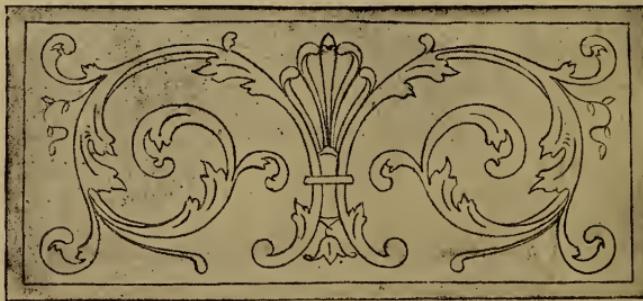


Fig. 4

The round-pointed tools B and C, shown in Fig. 1, are good grounders, and where large work and bold patterns are carried out they will be found of use.

As some very fine work is possible in fire-etching, the art

PYROGRAPHY

can be applied in many ways to decorate pieces of useful and ornamental furniture about the house.

Charming pictures can be produced on holly and white mahogany; designs of fruit and flowers and conventional patterns may be applied to panels, tables, screens, frames, glove and handkerchief boxes; and on maple bedroom furni-



Fig. 5



Fig. 6

ture designs in pyrography lend a pleasing and artistic appearance.

Practical Hints

When working on leather do not cut out the form until after the work is finished, but pin the material flat on

a board to hold it firmly while operating with the hot irons.

The entire design should be drawn on the face of the leather with a soft lead-pencil, and afterward gone over with the burning-points. When the work is completed the piece of leather should be removed from the board and the outline cut with a sharp penknife or a pair of scissors.

The Varnish Finish

It may be desirable to varnish and polish some specimens, and it is possible to do so by coating the surface with a thin spirit varnish or thin furniture polish. This will bring out the density of the burnt lines, and enrich a design that on certain woods might seem flat. Too much varnish must be avoided, and only a very thin coat will be necessary to obtain the desired result.

The Practice of Pyrography

In preference to the hand-made irons, which must be heated each time before using, the modern devotees of the fire-etching art use the gasoline lamp and platinum-point apparatus. These outfits may be purchased at the art shops for a comparatively small sum.

Basswood, deal, and white-wood are the material most commonly employed, since the grain is close and the color even. Small picture-frames can be made from one piece of wood, but they are better, and will last longer, if made from two pieces. For a small round frame a pretty pattern

PYROGRAPHY

is shown in Fig. 7. This can be made from six to twelve inches in diameter, and the frame proper should be from two to four inches wide, having an opening for the picture from two to four inches in diameter. The easiest way to make a frame is in two pieces, as shown in Fig. 8, the left side representing a narrow frame and the right a wider one.

From holly or basswood one-eighth or one-quarter of an inch thick cut a disk six inches in diameter, and at the



FIG. 7

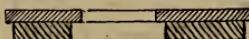


FIG. 8

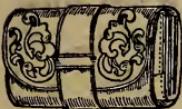


FIG. 10

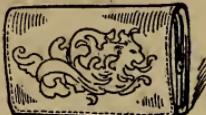


FIG. 11



FIG. 9

middle cut an opening three inches in diameter. Strike the circle with a compass; then use a fret-saw to do the cutting. From pine or white-wood half an inch in thickness cut a disk five and a half inches in diameter and at the middle a hole four inches in diameter. Lay the thin disk down on a table, and after applying glue to one surface of the smaller but thicker disk place it, glue-side down, on the larger disk, taking care to have the grain of the two pieces

run in opposite directions. See that the disks are adjusted so that one is centred directly over the other; then impose a piece of board on top of the frame, and put fifteen or twenty pounds of flat-irons or other heavy weights on the board to press the two wood pieces together. Leave them for several hours; then remove the weights and clean off the hard glue that may have oozed out from between the disks. Give the back of the frame two coats of shellac to prevent the wood from absorbing moisture, and it will then be ready for the design and the pyrographic ornamentation. By using the two pieces of wood, a rabbet is thereby formed for the glass and picture. If the frame had been made from one piece it would have necessitated the cutting of a rabbet.

Leather-Work

When embellishing leather, select the quality that is best adapted to pyrography. It must not be too thin, as the hot point would quickly perforate and cut it. Cowhide, Suède, calf, sheepskin, heavy kids, and binding leathers are best adapted to this work. Purses, bags, mats, boxes, travelling-rolls, and valises are made in leathers that are admirably adapted to pyrography, and these should be purchased rather than made, for leather-working is a craft that would not interest the average girl.

A heraldic pattern for a small pigskin or cowhide purse is shown in Fig. 9, and Figs. 10 and 11 are designs adapted to different kinds of purses, wallets, and bill-books. It is, of course, impossible to lay down any specific sizes for these patterns, as the sizes of leather goods vary.

PYROGRAPHY

To improve the appearance of floral patterns, it is desirable to tint or stain flowers, leaves, berries, and stems in their natural colors. This can be done on the unfinished wood, either before or after the outlines and background are burned. Oil or aniline stains may be used for this purpose. If a dead finish is desired, the wood can be left without further treatment, except for a thin coat of beeswax and turpentine. If a glossy finish is preferred, the wood must be treated to several thin coats of white shellac; then a finishing coat of white dammar-varnish is applied and left to dry for several days. The inside of boxes should be "grounded" and shellacked, and at the top and bottom pads made of card-board, cotton-filling, and silk should be glued fast.

Chapter XVII

CANDLE AND LAMP SHADES

THE artistic leaded-glass lamp-shades are a thing of beauty and a joy forever, but so many of us may only go to look and admire, that these few suggestions as to making a very good substitute may be welcomed by the girl with clever fingers.

The designs are many and varied—from the conventional flower and butterflies to the uneven stained-glass effects. The Empire shape of the designs shown adapts itself most readily to this style of shade, of course the size varying to suit the fancy of the maker. A little variety may be given, if desired, by extending the design a little below the edges of the shade, as, for instance, a design like the spray of wistaria, to be continued about an inch below the edge, at irregular intervals (Fig. 1). Another effective design is to have the flowers begin at the lower edge of the shade, and leaves and all to extend upward instead of downward. The flower part of the design could extend a little below the edge, stems and leaves, of course, beginning at the edge of the shade, the irregular part being placed in this case at the top.

The making of these shades is not at all difficult, only

CANDLE AND LAMP SHADES

care must be taken to have a very sharp knife to make a clean-cut edge for the cut-out part, and to make the lamp-shade the same width all around, else it will not be straight

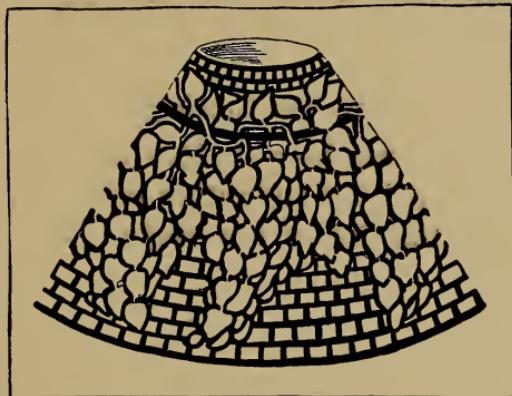


Fig. 1

when on the lamp. A good way to judge if it is even is, after it is cut out, to fasten the two ends together as it will be when finished, and put it on a perfectly smooth surface, such as the top of a table. If it touches evenly all the way around, all is well.

The Materials

The materials required for the making of one of these lamp-shades are a piece of heavy white water-color paper, size twenty-five by nineteen inches, a piece of white taffeta silk the same size, a bottle of black water-proof India ink, a box of water-color paints, and a bottle of mucilage. For the large size, cut out from the paper (the shape indicated in the detail) a shade measuring eight inches in depth all the way around—that is, from top to bottom—the lower

edge forty-seven inches around, the upper, seventeen and a half inches. For a small table-lamp, make the shade smaller in proportion, taking an inch and a half from the lower edge, and three inches from each end. The dimensions are given in Fig. 2.

Marking and Cutting Out

When the design has been decided upon, mark it carefully with a sharp-pointed and rather soft pencil, on a piece of tracing-paper the size of the shade. Lay this on the

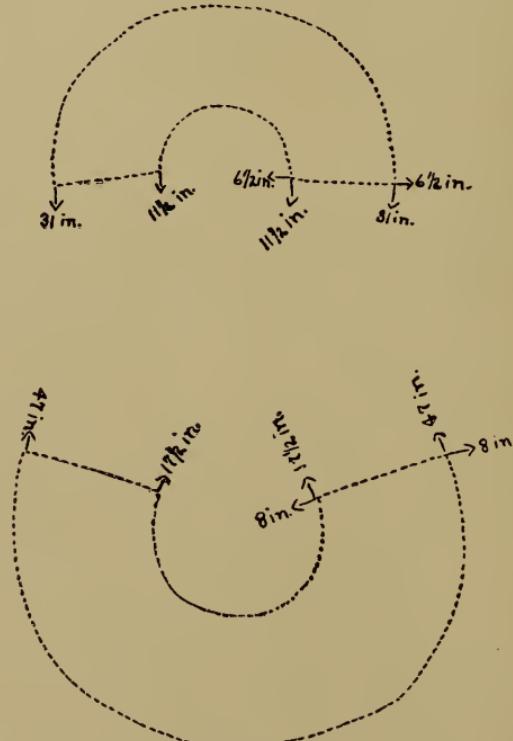


Fig. 2

CANDLE AND LAMP SHADES

water-color paper, pencil side down, and trace over every line of the design. When this is done, go over the pencil lines, on the shade, with ink, to prevent rubbing. Now cut out with a sharp knife the markings as indicated in the detail by dotted lines in Fig. 2. As you will readily see in Fig. 3, there is always a black line around the flowers,

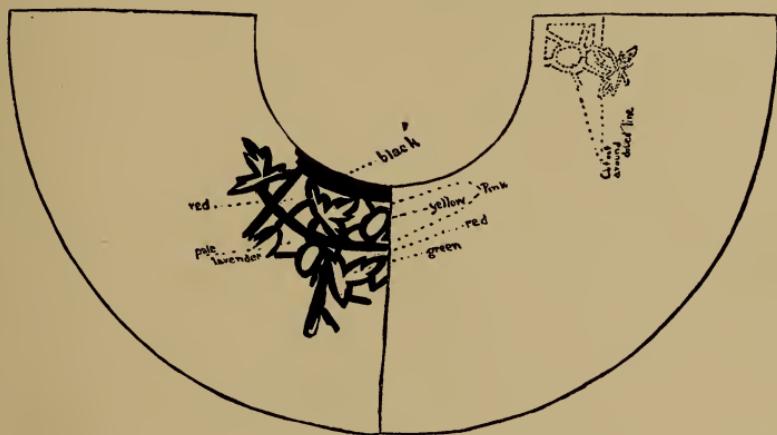


Fig. 3

leaves, etc., which takes the place of the lead in the glass shades, giving support and outlining the design, so this must be always borne in mind when marking and cutting out. No matter how small the part to be cut out, it must have its outline the same width as the rest. An eighth of an inch is about the average size for the "lead," except where it is deeper, as indicated in the drawing.

The inking of the outside comes next, and it should be seen that every particle of white showing from the outside is made black. Use a small camel's-hair brush. The water-proof ink will not hurt the brush, as it easily washes

off. Care must be taken that all parts are an even black, as one is apt, when putting ink on with a brush, to make some places slightly lighter than others. Go over these parts a second time.

When the ink is thoroughly dry, lay the shade, wrong side up, on a piece of brown paper, and cover all the parts with mucilage. When this is done, and it must be done rather rapidly to prevent the mucilage from drying, lay a piece of silk, which has first been cut out the exact size of the paper, on the mucilage-covered parts, and press gently all over with the tips of the fingers. Care must be taken that not enough mucilage has been put on to run over the edge, and yet enough to glue all parts securely. This must be left to get thoroughly dry before continuing.

The Coloring

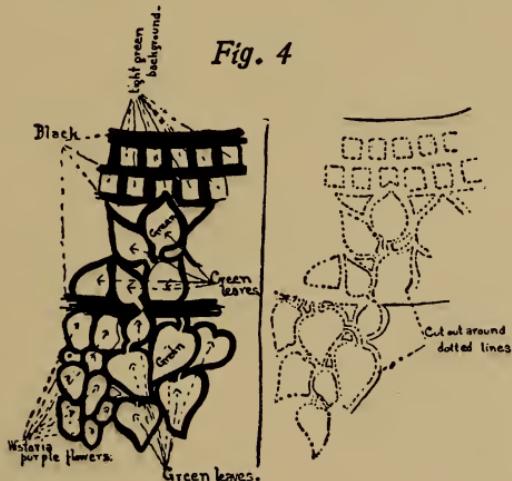
The coloring is now put on with the water-colors, and as much depends on the shades used, keeping as much as possible to the soft greens, lavenders, yellow, etc., care must be taken to have the color perfectly clear and quite thin. As will be seen, the effect of the light shining through must be taken into account, so colors should be used, as nearly as the design will allow, that are improved by the light shining through them. Green, lavender, yellow, a soft shade of red—that is, not a purple-red—are all good colors. A hard blue should never be used, but a very bluish purple is good. One of the designs is wistaria, of two shades of lavender flowers and green leaves, stems of green, and all cut-out places, not the flowers and leaves, but the back-

CANDLE AND LAMP SHADES

ground, a little deeper green than the rest. As will be seen, the leaves form the design for the upper part of the shade, and come between the sprays of the flowers on the lower part (Fig. 4).

The Iris Design

The design of the blue flag, or iris (Fig. 5), with its green leaves and stems, is especially pretty. The flowers are of bluish lavender or purple, a little lighter, if possible, toward



the centre of the flower. The background is a very light yellowish green. This design is also effective using yellow jonquils instead of the blue flag, as the same leaves could be used, only changing the shape of the flowers.

A Butterfly Shade

The butterfly lends itself to a very decorative design, and still the simplest of all (Fig. 6). The butterfly is of a light

HANDY-BOOK FOR GIRLS

red, the color being quite thin when put on. The two lower wings should be a trifle darker than the two upper ones. The body is a much deeper tone. The rest of the colored part of the shade is a soft green. The butterfly could also



Fig. 5



Fig. 6



Fig. 7

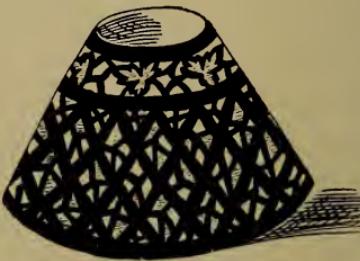


Fig. 8



Fig. 9

CANDLE AND LAMP SHADES

be of yellow, which is quite as effective. Any ornamentation on the wings could be put on in black if desired, but it rather detracts from the stained-glass effect.

As has been said, the color should be quite thin in most instances, and put on with a very small camel's-hair brush. The shade is colored from the right side.

It must be clearly decided where the different colors are to go before coloring, as it is not easy to rectify errors when once made. When the work is perfectly dry, place it flat with the wrong side up, and paint with Chinese white all parts that are black on the right side, making a neat finish, and glue the two ends together.

Candle-Shades

Candle-shades that are effective and yet simple in design are pictured in Figs. 7, 8, 9, and suggest, when the candle is lighted, some of the effects of the artistic stained and leaded glass. White water-color paper, white taffeta silk, and a few water-colors are the materials used for these also.

Mark out the candle-shade on the water-color paper. It is really a perfect half-circle, eleven and one-eighth inches in diameter. Cut out another half-circle three and five-eighths from the outer edge, and you will have the shape shown in the diagram. The shade when finished is two and a quarter inches in diameter at the top and five and three-quarters at the bottom.

On a piece of tracing-paper mark out carefully, with a rather soft pencil, the design. As you work, many variations in the designs will suggest themselves. Strive to

keep them as simple as possible, always choose colors that harmonize, and bear in mind the effect of the light showing through when the candle is lighted. The water-colors in tinting the silk must be kept thin, and tried against the light. After the design is marked on one side of the tracing-paper, trace it on the other side or transfer it with carbon paper. Carry out the design on the shade with a pencil to make it distinct and perfect. Tracing-paper is used instead of marking the design directly on the shade, as the line is much more apt to be sharp and even.

Cutting the Design

Cut out with a sharp knife, leaving the design as shown in the dotted lines of the detail. Color it as your fancy dictates, preference being given to black, gold, or silver outline. Cover the inside with liquid glue, and lay on the white silk, being careful to keep it perfectly smooth. When dry, cut the silk carefully from the edges. Care must be taken that all the little parts of the design are glued fast, as it mars the effect if there are any loose places. Mix the water-colors, and paint all the parts of silk to be seen, care being taken not to let the color run over on the outline. On the inside, paint over all the parts where the glue shows through, a thick coat of white. This makes a neat finish. If a design of flowers and leaves, the background could be in two tones, harmonizing with the color of the flowers, the outlining being black.

The first candle-shade (Fig. 7) is in two tones of red and two of a light purple for the background. The leaves are a

CANDLE AND LAMP SHADES

light and slightly darker green, and the oblong disks light yellow. This sounds like a rather abrupt contrast, but seen with the light shining through it gives a very pretty effect. The detail shows the distribution of colors.

The second shade (Fig. 8) is in two tones of purple for the background, a light shade of green for the leaves, and gold outlining.

The third shade (Fig. 9) is a grape design, with brownish-green leaves and black outlining. The grapes are three shades of purple, keeping them rather light; the leaves, a brownish green, some very light. The background is a very light yellowish brown. This will be found to tone well with the other colors.

Chapter XVIII

RAFFIA BASKETS

THE baskets here illustrated are all made of raffia on a foundation of reed. In beginning any one of them it is advisable to use a coil of the raffia for the first few rows in place of the reed. It is perfectly flexible and easy to manage, and by this means a firm centre can be made with little trouble. After several rows have been completed, the reed should be inserted, the point having been previously sharpened so that it can be easily thrust into the coil of raffia. After a firm stitch or two has been taken, the raffia foundation can be cut away, leaving the reed to take its place. The beginnings for baskets in different stitches are here pictured, each one being ready to receive the reed. Example No. 1 (see Fig. 1) shows the stitch which can be the most rapidly worked. The raffia is wrapped several times round the foundation, and then fastened with a tie or knotted stitch to the row beneath. The knots make a pretty effect in the basket, and by varying the distance between them a more or less open effect can be obtained. The baskets so made are dainty and light, yet strong. This is particularly true of the one shown in Fig. 2, which is suitable for use as a card-tray. The color effect is most artistic,

RAFFIA BASKETS

being a scheme of yellow, green, and brown, admirably blended. After making four rows in the natural raffia there come single rows of the colors in the following order: light yellow, brown, light green, deep yellow, dark green, brown, light green, light yellow. The border is of the colors, used

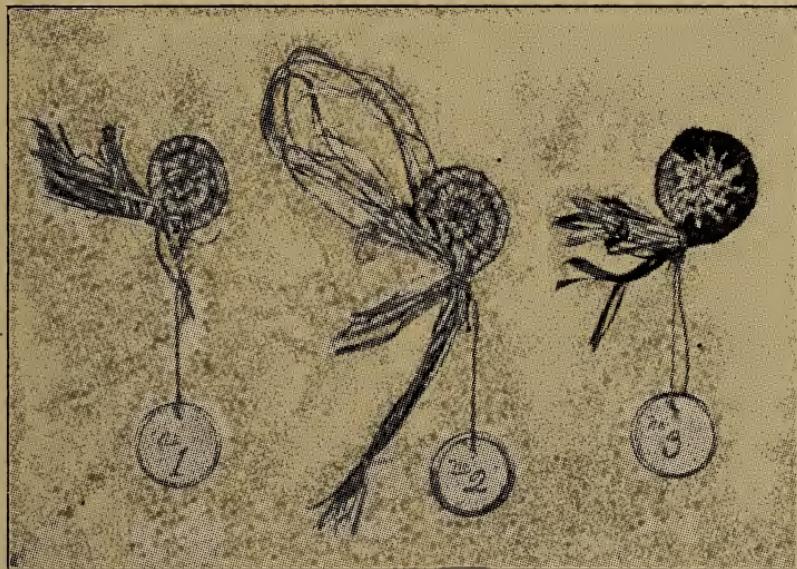


Fig. 1

in the same sequence, the row forming the edge being of the dark green. Fig. 3 is a somewhat simpler basket, firmly worked. The broad rows of one color introduced in the bottom of the basket and as a border form the sole decoration.

Details of Weaving

A pretty open effect has been given in the sides and lid of this basket, a space as large as possible being left

between the rows. The bottom is, however, closely woven in the figure-of-eight stitch. This stitch is much used by the Indians, and it makes a very firm, strong basket. In the true figure-of-eight the stitch is taken alternately around the new row being made, and back around the row below. Where a new color is not being worked in, the stitch is often modified, the raffia being wrapped twice or thrice around the reed forming the new row, and then once around the row below. This stitch is used in all the other baskets here illustrated.

A Quicker Stitch

A third stitch is called the "lazy squaw." It probably owes its name to the fact that it is an Indian stitch, much more quickly worked than is the figure-eight. In making it the raffia is wrapped once round the reed, then passed through the row below, and brought over both rows. A long and a short stitch are thus formed. Each long stitch is sewn around the short stitch below, thus covering it. When it is necessary to increase the stitches as the circle grows larger, two long stitches are made together, and the needle passes between them in making the next row. Care must be exercised to make the stitches appear even, especially in working in a new color to form a pattern of any kind. More than one of these stitches may be used in one basket with good result.

As to Designs

An example is shown in Fig. 4. This is the most original design of the series. The motive employed is

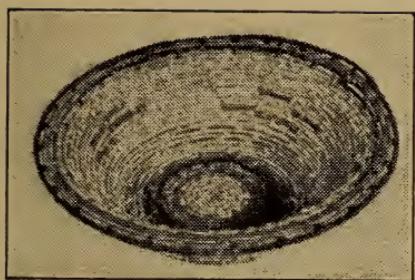


Fig. 2

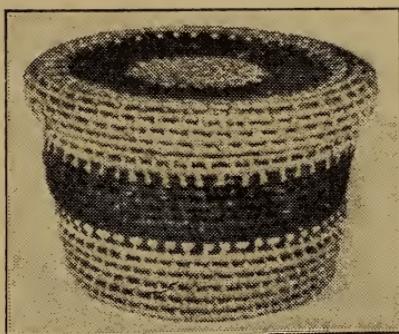


Fig. 3



Fig. 4

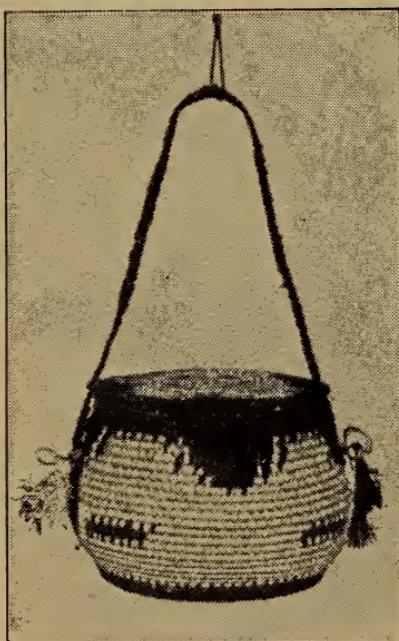


Fig. 5

A SET OF RAFFIA-BASKETS

HANDY-BOOK FOR GIRLS

the blackberry. On the lid six leaves in green are worked upon a background of the natural raffia. Set between them in a circle are three black, rounded forms and three red ones, intended to represent the ripe and unripe berries. A blossom is worked into the centre of the bottom of the basket. The borders of both lid and body of the basket are in the same colors, repeated in regular and irregular bands. The patterns used in the baskets in the other illustrations need no special explanation. The handle for the hanging-basket (Fig. 5) is woven. Five strands are used for the woof. Near the end these strands are separated, and, together with the weaving thread, made into two plaits, each terminated by a small tassel of fringed raffia. The basket for collars is simple and beautiful in shape and color. The pattern is in a russet brown on a natural raffia background.

Chapter XIX

HAND-WOVEN RUGS

THE long-looked-for "missing rug," appropriate for simple country houses and for the bedrooms of more elaborate houses, has arrived. A worthy but almost unrecognizable offspring of the old-fashioned hit-or-miss rag carpet, its adaptation to the crying need of the present generation for a simple, inexpensive, and, at the same time, artistic and durable substitute for the Oriental and its train of unworthy followers, has passed from the experimental stage to one of assured success.

The fact that new materials instead of the half-worn clothing, sheets, blankets, etc., which went to make up the "hit or miss" masterpieces of our grandmothers, are now being used, and that the design and color are studied carefully in relation to the places in which the rugs are to be placed, has revolutionized the art—has, in fact, turned it from an industry into an art. The question of artistic effect, both in color and in weave, has become the point of supreme importance. While our ancestors sewed and wove their rags with a happy, care-free disregard of all save practicability, glad indeed of a bit of bright color to give variety, but resigned to anything that would weave well, we con-

sider our colors and the place they are to go first, and then bow to the disagreeable limitations of practicability, if bow we must. Since the cost of these rugs is comparatively slight, we can sometimes afford to shut our eyes to limitations of this sort, but we cannot afford to ignore the required artistic effect.

Those of us who wish may have these rugs made to order by clever craftsmen from rags supplied by ourselves; or, if we have the time and the taste, we may buy a loom and experiment for ourselves. The craftsman or decorator, backed by his dye-pots, his artistic eye for color, and his technical knowledge of weaving, can undoubtedly give us the most satisfactory results. He can make them of any shape, size, or design, and can adapt them to any color scheme. His artistic instincts will lead him to make experiments with materials of all kinds, and the results will be original as well as beautiful.

The Loom in the Home

Those who care to make their own experiments, however, will find it extremely interesting and agreeable as well as profitable. It is not difficult to obtain simple, practical results, and the work goes so rapidly that it never ceases to be fascinating. The cost of the loom and materials is comparatively slight. Old looms may be found for five or ten dollars. They are as good as the new, although a little more cumbersome to handle, and requiring more house-room than it is sometimes convenient to give. The new ones may be bought for from twenty dollars up to a hundred. It is quite easy to learn the technical part of the

work, and opportunities for instruction are given at innumerable industrial schools, arts and crafts societies, etc. One may even find some of the old-country weavers who will gladly teach one the secrets of their craft. The warping up is difficult, but the weaving itself is simple. The beginner will probably not dally with dyes and dye-pots. She will buy inexpensive cotton materials at about ten cents a yard, selecting her colors carefully with an eye to the final result, and will satisfy herself with the warp in the colors in which it comes, without investigating too carefully the fastness of the colors. She will obtain surprisingly good results in this simple way. However, since one of the practical beauties of these rugs should lie in the fact that they can be washed repeatedly, it is well to consider the color question from the practical as well as the artistic side. The darker rugs, used for living-rooms, halls, etc., will not need to be washed—at least no more than their companions, the Orientals—but the light rugs used for bedrooms and bathrooms need it constantly. One should buy materials for them that at least have a reputation for fast color. When the dye-pots are resorted to, if the craftsmen are loyal to their ideals, only fast vegetable dyes are used, and these are carefully fixed and tested before the weaving begins.

The Material

Old materials, such as portières, curtains, ingrain carpets, etc., may be used if they are in good condition and the colors are good, but as a general thing new materials are used. Ginghams, percales, prints, cotton flannels, chintzes, can-

vas, chambreys, ticking, denim, etc., are worked up beautifully if the colors are carefully chosen. Ticking and denim are more durable than the thinner materials. Denim is especially artistic in color, and is one of the satisfying materials that can be unravelled on the edges so that the surface of the rug will be rough and artistic. Unbleached cotton-cloth, cheese-cloth, canvas—anything in a light, neutral tint that will take color well—is used by the dyers, and transformed under their magic touch.

The Colors

The color effect depends more upon the warp than one would realize. The warp tones the colors. An écrù warp gives a soft, mellow tone to colors that might otherwise be crude. An indigo warp with a green filling and touches of the indigo in the figure and border is very effective; a brown warp with an old-blue filling and dashes of brown and dull yellow in the border is very rich and beautiful; an écrù warp and an old-blue filling—a light brown warp and dark brown and yellow filling—all are harmonious and artistic. When materials are dyed, no effort is made to make the cloth take the color evenly, so that the effect of light and shade is unstudied and consequently unusually good. In weaving, although there is sometimes a definite design, frequently bits of harmonious color are introduced unevenly, especially in the borders. Indeed, the most artistic rugs are not those with an absolutely smooth surface and borders and designs mathematically arranged with hard outlines. A very good color rule is to introduce the

HAND-WOVEN RUGS

warp color in the border or figure. Sharply contrasting colors should not be used in a rug, only those that blend and harmonize softly. An original artist will sometimes use very surprising material for his warp and filling as well. The final color effect is all that he considers. It is not unusual to see coarse linen twine used for the warp, forming the fringe as well. The coarsely twisted twines are sometimes used for the filling also. The effect is astonishingly artistic.

Practical Hints

In preparing materials for weaving, whether we are to do the actual weaving ourselves or hand the rags, when cut and wound, to an expert weaver, great care must be taken. The strips may be cut straight or on the bias. Those cut on the bias are more flexible and will make more flexible rugs. They should be about three-quarters of an inch wide, or a little less if the material is heavy. If the strips are not on the bias, it is easier to keep them exactly the same width by tearing instead of cutting. They must be sewed together very smoothly and firmly, so that there will be no bunches in the weaving. It is better to keep the colors on separate balls, without attempting to mix them. Striped and figured materials give very attractive results with borders of a plain material, but the plain material should be kept in a separate ball for the weaver to use as he pleases. The amount of material required for cotton or woollen rugs in a smooth weave is from one and a half to two pounds of rags for one square yard of weaving; for silk rugs or portières, one pound for a square yard; for

HANDY-BOOK FOR GIRLS

a roughly woven cotton or woollen rug, two to four pounds.

The prices for weaving are as follows: When the weaver supplies all the materials and dyes them according to orders, two dollars per square yard; when she supplies nothing but the warp, and has all the material given to her, cut, sewed, and wound into balls ready for use, fifty cents a square yard; when the material is given to her unprepared, one dollar a yard; when the material is given to her unprepared and she is expected to dye it as well as cut, sew, and wind it, one dollar and a half a yard.

Part III

NEEDLEWORK AND MILLINERY

Chapter XX

SIMPLE DRESS-MAKING LESSONS

ON a bright, sunny morning three young girls were sitting around a table in the school-room of a pleasant, old-fashioned house. Each girl had a work-basket on the table in front of her, containing needles, scissors, thimble, cotton, and a tape-measure; also a small blank-book and pencil, a marking-wheel, a paper of pins, and two yards and a half of white cambric.

The young faces glanced eagerly at a clock on the mantelpiece that pointed to five minutes of nine, and then to the door, as the handle turned to admit a young woman, whom they greeted as Miss Cutting. It was easy to guess now what these young girls were gathered here for. They were about to begin a series of lessons in dressmaking, and the young woman who had just come in was their teacher.

"Oh, Miss Cutting," exclaimed the three girls, "we are so glad you have come; we want so much to begin our lesson!"

"You are all very encouraging," answered Miss Cutting, smiling. "I hope your enthusiasm won't all evaporate before the lesson is over."

"Never fear," said Helen; "if Miss Cutting can't teach us to *cut*, I don't know who can."

"Helen," said Fanny, "don't make bad puns, and don't be so rude to your teacher."

"Oh," said Miss Cutting, "I do not think Helen rude. I have always thought it quite a delightful coincidence that my name should be so applicable to my employment. But suppose, now, we begin our lesson."

The First Day's Lesson

"Do tell me first, Miss Cutting," said Mary, "what is this little wheel for? It looks like the thing Jane, our cook, marks the top of the pie-crust with."

The girls all laughed, and Miss Cutting was also amused.

"That is to trace the basting-lines on your patterns," she said. "You will find it very easy to use."

There was a little hum of conversation for a moment, and then the chattering ceased, and three pairs of bright eyes were turned on Miss Cutting, who stood at the head of the table holding a tape-measure.

How to Measure

"The first thing to do," she said, "is to learn to take a person's measure, and to do this we must pair off in twos. I will take Helen's measure, and let her take mine, for the sake of practice; then Mary and Fanny can take each other's measure in turn. Before you begin, write down these items in your blank-books, leaving a small margin for the figures."

SIMPLE DRESS-MAKING LESSONS

Waist Measure	Sleeve Measure	Skirt Measure
Size of bust	Whole length inside	Length in front
Size of waist	Length to elbow (inside)	Length in back
Length of back	Elbow to wrist (outside)	Length over right hip
Length of front	Size of arm	Length over left hip
Width of chest	Size of hand	Around hips, six inches below belt
		Size of belt

Having told them this, Miss Cutting then took her tape-measure and passed it around Helen's figure, holding it close under the arms, and well up in the back, as seen in Fig. 1. Helen's bust measure proved to be thirty inches. The waist measure was then taken by passing the tape tightly around Helen's waist.

"Now," said Miss Cutting, "we must find the length of her back. To do this, measure from the bone you will feel in the back of your neck to the end of your waist; and if at any time you are in doubt as to where your waist ends, get a second tape-measure and tie it around the waist—it will guide you in knowing just where the length of the back should end."

"What is this measure for?" said Mary.

"It has several uses," answered Miss Cutting. "The chief one is to find the waist-line, which I will explain later, and its immediate use is to find out how long-waisted you are in the back. The 'length of front,' which comes next, is to ascertain how long-waisted you are in front. You have, of course, noticed, even without knowing anything of dress-making, how people vary in length from their necks to their waists."

Miss Cutting then took her tape-measure, and, placing

one end on the bone in the back of Helen's neck, she passed it over her shoulder and down the front to the waist (Fig. 2). Mary and Fanny started to do the same thing, each in turn, when Mary exclaimed:

"Fanny, are you trying to bore a hole in my neck?"



Fig. 1



Fig. 2



Fig. 3

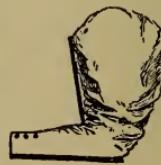


Fig. 4



Fig. 5

"I have lost your bone," said Fanny, tragically, which made them all laugh, and brought Miss Cutting to the rescue.

"Here it is," she said; "this small, prominent bone right in the middle of the back of your neck and at the top of the spine. It serves as a starting-point to measure from, so is very useful. Now," she continued, "for the chest measure. Pass the tape right across the chest to where the arm joins the shoulder, allowing it to be about three inches below the neck. This," said Miss Cutting, "ends the measures for a waist. Some dressmakers use more measurements, but I find these all that are essential to insure a good fit. Our next step is to find the sleeve measure, and for this you take the whole length of the arm inside, meas-

SIMPLE DRESS-MAKING LESSONS

uring from the top of the arm to an imaginary line joining the bone on the outside of your wrist" (Fig. 3).

"Must I have such a long sleeve?" said Mary.

"No," answered Miss Cutting; "that is not necessary. The fashion in the length of a sleeve varies, but as we have to have some points from which to start and to end in taking a measure, the bone in the wrist is given as the end of the arm. After your sleeve is cut out and basted, you can either leave it long or cut it shorter, as you may desire."

"Oh," said Helen, "I see; and the bone in the back of the neck is for the same purpose."

"Yes," replied Miss Cutting; "and now having found the length of the arm inside, we next measure the length of the arm to the elbow (inside) and then from the wrist to the elbow (outside) (Fig. 4), drawing a line between these two points. This line, which is called the 'elbow point,' is to show where to put the gathers that are at the elbow of nearly all sleeves. These gathers should run one inch above and one and a half inches below the elbow point. We now find the size of the arm, passing the tape around the fullest part (Fig. 5). Finally," said Miss Cutting, "we measure the hand right across the palm and over the knuckles where the hand is widest."

"I suppose," said Fanny, "this is to show us how wide to cut a sleeve at the wrist?"

Just then a merry laugh broke from Helen, in which both teacher and pupils joined when they saw the cause. Mary had her tape-measure around Fanny's hand, when she discovered that Fanny's thumb was standing straight out in

HANDY-BOOK FOR GIRLS

the air, and there was a look about that thumb that said "I will not be measured."

After the merriment had subsided, Miss Cutting said:

"Yes, Fanny, you are right, but we can hardly expect to cut off your thumbs in order to get your hand through the sleeve at the wrist; so if you hold your thumb close to the side of your forefinger the whole width of the hand will be measured, and we can be sure the sleeve is wide enough to let the hand pass through."

"I think this is very interesting, Miss Cutting," said Helen, "and I hope we can understand the rest of the lesson as well."

"I like it immensely," said Mary.

"So do I," said Fanny. "Won't you tell us, Miss Cutting, what comes next?"

"Our lesson is over for to-day," answered Miss Cutting. "This morning you have learned to take measures. Next week I will teach you how to measure and cut out a pattern for yourselves, and when that is done you will each make a pretty dress."

"Oh!" exclaimed the three in a breath, "how lovely that will be!"

The Second Day's Lesson

The following Saturday morning found the three young people and their teacher busily at work. On the table in front of each girl Miss Cutting had laid a white muslin waist-pattern. Their books showing the measures taken the previous week were open alongside of their patterns.

"You will see," said Miss Cutting, "that a waist-pattern

SIMPLE DRESS-MAKING LESSONS

consists of four pieces—a front and a back piece, a front side-piece, and a back side-piece (Fig. 6).

“It is important that you should learn the names of these waist pieces, and how they are joined together. The two larger pieces for front and back are easy to become familiar with, but the side-pieces to an inexperienced eye are very similar. You will notice that the front side-piece is quite straight, while the back side-piece is more curved. These patterns, when bought,” said Miss Cutting, “are always made of tissue-paper, but I cut new ones of strong muslin or paper, as being easier to handle and more durable. I have given each of you a pattern as near your bust measure as possible, and you will have to make a pattern to fit yourselves.”

“Won’t this be very hard?” asked Fanny.

“Not if you follow me closely,” said Miss Cutting. “A little familiarity will make it extremely simple work.

Applying Measures to Pattern

“Now,” she continued, pinning the waist together by the seams, and laying it out flat on the table, “the first thing is to measure the length of back and mark a waist-line. This is Helen’s pattern; her back measured fifteen inches in length, so I measure fifteen inches on the back piece from the neck down. When I get to the fifteenth inch I mark a line straight across the back piece at this point (Fig. 6). Then I take the back side-piece, and laying it alongside the back piece so that it is even at the armhole, I draw a waist-line across it where it will join the one on

HANDY-BOOK FOR GIRLS

the back piece. I follow this rule with each piece in turn, until there is a waist-line on all four pieces."

"What can this waist-line be for?" asked Helen.

"It has so many uses," said Miss Cutting, "and is so important that you cannot give it too much attention; but it will be better as we progress for you to find these uses for yourselves, one by one. I now pass my tape-

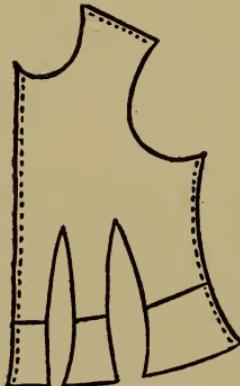


Fig. 6



Fig. 7

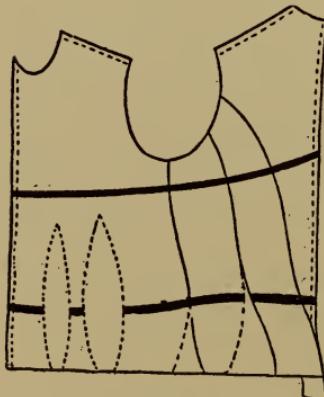


Fig. 8

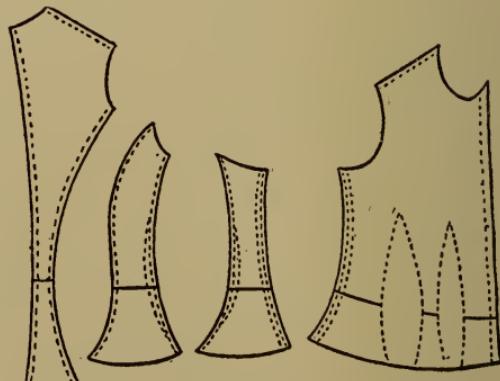


Fig. 9

SIMPLE DRESS-MAKING LESSONS

measure across the pattern from the opening that forms the line for buttoning in front to the middle seam at the back, letting it be about an inch below the armhole (Fig. 8). This measures sixteen inches, which, multiplied by two, would make thirty-two inches. Of course, you understand that this is only half a pattern, and that in cutting a waist you would double the material and lining, so as to have eight pieces, four for each side. I will measure the waist-line the same way," said Miss Cutting. She did so, and found it was twenty-five inches.

"This pattern," said Miss Cutting, "is for Helen. Her bust measure is thirty-one and a half inches, and her waist measure twenty-three inches. So this pattern is half an inch too large at the bust, and two inches too large at the waist, and must be made the right size."

The three girls watched Miss Cutting closely, while she proceeded to measure the pattern a quarter of an inch smaller on the seam under the arm, and one inch smaller at the two side seams of the waist-line (Fig. 9).

"You will remember," said Miss Cutting, "that as this is only half a waist-pattern, I had to divide the amount by two, and instead of measuring half an inch smaller at the bust and two inches smaller at the waist, I made it a quarter of an inch for the bust and one inch for the waist. This," she proceeded, "is called grading a pattern. I must now draw a line between these two pencil-marks, to show where the seams are to be basted; and in cutting out your own waists it is these new seams, and not the old ones, that you follow."

"Won't we get puzzled between old and new marks?" asked Helen.

"Not if you mark them in different colors," said Miss Cutting. "In preparing these patterns for use, I mark all the seams, as you see, with a red lead-pencil, and when you mark new seams you can use a black or blue pencil; this will keep old and new lines distinct from each other. I measure the width of the chest across the front of the waist," she went on, "at a point three inches below the



Fig. 10



Fig. 11

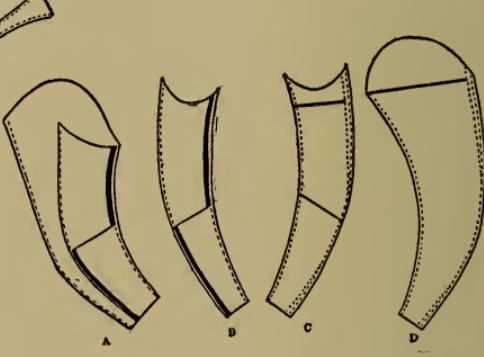


Fig. 12

neck. Helen's chest measure is thirteen inches from shoulder to shoulder, and consequently I measure six and a half inches from the middle of the front to the armhole (this being just half the required size), and then allow half an inch for a seam, making seven inches. I mark with a pencil, and take out the extra width at the front, so that the waist will be the desired width across the chest (Fig. 10).

"The last measure to take on the waist," said Miss Cutting, "is the length of point (Fig. 11). This is to get the waist a correct fit in front, so it will not be too long or too short waisted, just as you measure the length of back so

SIMPLE DRESS-MAKING LESSONS

that your waist will not be too long or too short behind. I pin the front and back pieces together at the shoulder-seams, and lay them out flat on the table; then I measure from the back of the neck, over the shoulder, and down to the waist-line in front. Helen's length of front is eighteen and a half inches, and this pattern measures nineteen inches, so I must make it half an inch shorter. Can you guess," she said, "how it should be done?"

"Yes," said Mary. "Move the waist-line half an inch higher up."

"No, my dear," said Miss Cutting; "that is exactly what you must not do; the waist-line should not be altered. What you have to do, if your pattern is too long or short-waisted, is to make it longer or shorter between the shoulder-seams and the waist-line. I will measure from the back of Helen's neck to the fullest point at the bust and then measure the pattern, and if the pattern is too long I will make a pleat across the chest. If not, I will take the pleat in between the bust and waist, and it will then be the correct length."

"This is not so hard as I expected," said Helen, "and I think I understand the idea perfectly. By applying all these measures to the different parts of a pattern, one after another, I can alter its *size* and its *shape* to fit the person whose measure I have taken."

Grading the Sleeve Pattern

"Yes," answered Miss Cutting, "that is it exactly; and now I will conclude with the sleeve measure, and then

when Mary and Fanny have measured and cut out their waists, you will all be ready to baste and sew." Saying which, Miss Cutting took up a sleeve pattern and laid it on the table (Fig. 12 A). She then measured the length of the under part of the sleeve from the armhole to the wrist, measuring on the inside seam. The length came to nineteen inches and a half.

"Helen's arm measures eighteen inches," said Miss Cutting, "and allowing a quarter of an inch at top and bottom for seams, that comes to eighteen and a half inches. Consequently, I must cut this sleeve pattern one inch shorter. I next measure from the armhole to the elbow (*inside*), which for Helen is seven inches, and mark a dot with a pencil, then from the wrist to the elbow *outside*; and between these two points, inside and outside, I draw a diagonal line. This is called the 'elbow point' (Fig. 12 B)."

"What is that for?" asked Mary.

"As sleeves are often made," answered Miss Cutting, "they have a few gathers at the elbow; these gathers, which are on the upper or wide part of the sleeve, are joined to the under part one inch above and one and a quarter inches below the 'elbow point.'"

In conclusion she added: "We now have to find the width of the sleeve. I will pin both seams of the sleeve together, and lay it down with the *outside* seam lying flat on the table. I measure across the bottom the size of Helen's hand, seven inches. And across the top the size of her arm, twelve inches. At the bottom I allow one inch more and at the top two inches more to let the sleeve fit easily. I draw a new line from the top to the bottom of the sleeve,

SIMPLE DRESS-MAKING LESSONS

between the points I have marked; and let me add here that a sleeve should always be made wider or narrower on the outside seams (Fig. 12 C D). This," said Miss Cutting, "completes our work on Helen's pattern."

"But, Miss Cutting," said Helen, "this pattern you have altered for me was too large; suppose it had been too small, what would you have done?"

"I should have made it larger," said Miss Cutting, "by cutting it at necessary points, and inserting a piece of cambric wide enough to give the extra size."

"To be sure," said Fanny. "I wonder we did not think of that."

"I have lots to think of until next week," said Helen, as the girls began to fold up their work and clear the table.

The Third Day's Lesson

The next week, and for several succeeding weeks, the young people met together and made rapid progress. After all three had a waist and sleeve pattern measured and ready for use, Miss Cutting showed them the correct way to pin it to their lining. The lining was first folded double, and then the front piece of the pattern was laid on the goods with the front edge running parallel with the selvage of the lining. The front side-piece and the back pieces were simply laid straight on the muslin, care being taken to waste as little of the material as possible; but the back side-piece had to be pinned so that the waist-line ran parallel with the cross thread in the muslin.

The upper and under parts of the sleeve were laid on the

lining so that the outside edge from armhole to elbow ran parallel with the selvage of the muslin.

Having marked all the seams evenly and firmly with the marking-wheel, they proceeded to cut out the lining and unpin their patterns. Miss Cutting told them to cut open the darts of their waists to within two inches of the top, and showed them that they must gather all the seams on the lining from the waist-line to three inches above, drawing the front and side pieces a quarter of an inch full, and the back one-eighth of an inch full. She explained that on



Fig. 13



Fig. 14



the back pieces only the middle seam was gathered, and on the back side-pieces only the shorter side needed the gathers (Fig. 13).

Miss Cutting explained that this gathering on the lining before the seams were sewed up made the seams at the waist much smoother, and also allowed the bones that were sewed in the waist to bend without puckering the seams. She next stretched the shoulder-seams a little on the front pieces of the waist, and told them that in sewing this front shoulder-seam to the back, they should draw it quite tight,

SIMPLE DRESS-MAKING LESSONS

and at the same time hold the back edge of the seam easy.

Helen inquired the use of this rule, and Miss Cutting led her up to a mirror and showed her how much more hollow her chest was than her shoulder, and pointed out that every one was the same to a greater or less degree, and that consequently to keep the dress from wrinkling over the chest the material and lining should be drawn tighter there than on the back. All this work on the lining, she told them, was called "preparing it for use," and it was now ready to lay on the material so as to cut the waist out. The lining and material were basted carefully together, and the different pieces were all joined at the waist-line and basted up to the top; then basted from the waist-line down to the bottom, care being taken to follow the markings of the seams on each side.

Miss Cutting explained to them that this rule about beginning to baste at the waist-line did *not* apply to the four darts, which must be begun at the top and sewed down to the bottom of the waist.

The next step in their work was to try the waists on, and this caused no small excitement. Helen's, which had all been measured by Miss Cutting, was a perfect fit. Fanny's proved to be a little tight, and Mary's a trifle short-waisted; Miss Cutting assured them there was no cause to be discouraged. Fanny's waist could be let out a little on the side seams under the arms, and Mary's waist-line could be made lower.

When this was done they stitched their waists on the machine, and trimmed the seams, notching them in several

HANDY-BOOK FOR GIRLS

places, so they would lie flat. The seams were then pressed open with a hot iron, and overcast with sewing silk, or bound with binding ribbon, to keep them from ravelling. They next sewed their sleeves (Fig. 14). The outer part was gathered to the lining around the top, and then the upper and under pieces were sewed together, and the seams pressed and overcast. In sewing the sleeve in the dress Miss Cutting showed them that the outside seam of the sleeve joined the dress at a point just between the two seams of the back side-piece.

Fanny inquired how she was to cut her waist off at the bottom so that the two sides would be even.

"Here, my dear," said Miss Cutting, "you learn one of the uses of the waist-line. If you fold your waist double, and pin the waist-lines together all across, you can cut the end of the waist either round or pointed, and feel certain it will match on both sides."

"Do tell us some other uses of the waist-line," said Helen.

"You have already learned," said Miss Cutting, "that the first and chief thing it designates is our length of back, also where to begin basting up the seams of a waist and gathering the lining. Some other things it is intended for are to show us where to sew in a belt; how long to make a belt waist; and it also enables us, in making a plaid or striped dress, to match the stripes and plaids in the different pieces of the waist by laying the waist-line marked in the lining on the same color or stripe of the material."

The girls thought this quite wonderful, and commented on it as their fingers and needles flew. They had now ar-

SIMPLE DRESS-MAKING LESSONS

rived at their tenth lesson, and that morning saw the completion of their waists.

The bones for the seams were slipped into bone casing and fastened in so tight that they bent like a bow. They were then laid flat on the seams and herring-boned on one by one with button-hole twist. The bottom of their sleeves and the bottom of their waists were turned up half an inch and basted, and then faced with silk cut on the bias. A collar was cut from a pattern, sewed to the neck edge, and faced the same way.

During the two remaining lessons they made their skirts; the skirts were cut with five breadths, so as to have them wide enough to meet the prevailing fashion. The front breadth was sloped on each seam, measuring about fourteen inches across the top and twenty-five inches at the bottom. To each side of this front was sewed a narrower breadth, the side sewed toward the front being straight and the other side gored. The back consisted of two straight breadths. The whole skirt, when finished, measured about three and a half yards around the bottom. The seams were then stitched on the machine and pressed open. The bottom of the skirt was faced; the top gathered or pleated in the back and fitted to the figure. The whole skirt was then put into a band.

Before the twelfth and last lesson the dresses were done, and the young people confessed they had learned a great deal and enjoyed it very much.

“The only thing is,” said Mary, “I feel rather timid about attempting a dress all alone.”

“That is very natural,” said Miss Cutting; “you all know

HANDY-BOOK FOR GIRLS

that a few lessons in music and drawing don't make you perfect—they only show you the *way*. You need a good deal of practice at music and drawing to become really proficient, and learning dressmaking is very much the same thing.

"I have no doubt you will meet with some failures, but if you keep on you will also meet with success. Begin first on simple and inexpensive goods; after you feel more confidence in yourselves, take up good quality material.

"Another good idea," she added, "would be if you were to begin by teaching dressmaking in a simpler form to your little sisters. Teach them to make dresses for their dolls. You can buy dolls' patterns at any good pattern shop, and omitting the difficult part of measuring, the little people could easily learn a great deal from you. It would help to fix it all in your own minds, and I am sure you could make it interesting for them."

"I mean to try everything," said Helen, "and I am very sorry to-day is our last lesson; but we shall see you again, Miss Cutting, and tell you how we get on."

Chapter XXI

DETAILS OF DRESS FINISHING

TWO points that often puzzle the home dressmaker are the finishing of the foot of new skirts or the putting on of the braid or binding when the renovation of these portions becomes necessary. A few hints upon these two points should be of service, and also upon the proper method of finishing the placket. It will be understood that the rules given apply to the making of skirts in general.

Facing Skirts

There are several ways of putting on a skirt facing, and the particular one most suited to any individual skirt must be decided by the texture and make of the latter.

The end desirable is to make the lower edge of the skirt set smoothly and firmly, but not clumsily, over the foot. Fashion also decrees what amount of firmness or stiffness is correct for the hour. As being the simplest style, we will first take for example the "rainy-day" skirt, which is a most sensible and apparently indispensable garment to every American girl's wardrobe. It is made usually of the

double-face tweed, which has contrasting surfaces of plaid or plain tones. When this texture is very thick and unwieldy, the seams are apt to be clumsy if stitched up in the ordinary way. A lapped seam is here preferred, and this is made by laying edge over edge, and stitching twice, first on one side and then on the other, placing the line of stitching as near the raw edge as possible. This serves to make a neat and fashionable seam. By this means, also, the right and wrong sides of all the seams are similar, and equally neat. Therefore, instead of facing the foot edge, and so making the latter set out as if wired, use a very fine quality braid, and stitch it on to the raw edge as a binding as neatly as a coat edge is bound; the braid itself will give the necessary amount of stiffness, and the skirt will feel much more comfortable and set better than it would do if faced (Fig. 1). For tweeds of a lighter weight, cut a five-inch-wide strip of material to fit the shape (or exactly on the bias, and stretch the lower edge to shape it), making any necessary joins always on a straight thread. This is most important. Press every seam open with the same care as is given to the seams of the skirt. Next, lay the facing, or false hem, as it is sometimes called, on to the skirt edge to edge, with the two right sides of cloth meeting. See that the hem is not the least bit tight on the skirt, and baste and stitch them together along the lower edges. Take out basting thread, turn the hem over into place and baste it again, so as to insure the seam coming right on the edge nicely and sharply; then, before going any further (assuming the material is a thick one), press it well with a hot iron to make the edge set quite flat.

Finishing the Top of Facing

This done, it will be a simple task to baste the upper edge of hem rather firmly so that the machine cannot push the one cloth along the other while stitching it, in one or more rows from the right side (Fig. 2). If stitching is not desired, hem by hand along to the *back* surface of skirt cloth only, so that the stitches will not be visible on the right side.

It is a matter of individual taste whether skirts made of faced cloths and materials of similar weight should be lined or not, but since it is now well known that much weight does not necessarily mean warmth, many prefer to have their cloth skirts made up with loose drop-skirt linings, or even without any lining whatever, electing to wear the silk under-skirt as a separate garment. Once this plan is adopted it is generally continued, especially with the prevailing long skirts, as they are so much more easily lifted. Skirts made up in this way, especially when of light-weight Venetian or face cloth, require nice facings about thirteen inches deep, which should be of silk preferably. The next best material is fine Italian cloth or lansdowne.

The facing must be cut very carefully to correspond with shape of lower edge of skirt. For the amateur the safest plan is to cut it the required depth to match the lower edge of each portion of the skirt, and then join the pieces together, as in the case of the skirt seams, stitching the silk with *slightly* narrower turnings (if the same have been allowed on both), so as to make it the least bit loose on the cloth.

Next take a strip of fine crinoline cut on an exact bias in strips two inches wide, which lay on the inside of cloth edge. Turn up and baste both together, in the one-inch turning that will have been allowed in cutting out the skirt. Now place the lower part of skirt wrong side up over your lap-board, and, beginning with the centre of front, baste the facing along at its two edges, turning the latter under as you proceed. Be careful to smooth the material, but avoid doing so to the facing, as smoothing one material over another tightens the upper one. It is essential that a lining of any sort be slightly easy to the material. Finally hem and press the edge nicely (Fig.3), the top row of stitches being done invisibly, as they must not show on the right side. It may be impossible to prevent the stitches from making an impression, but this should disappear after the pressing.

Lined Skirts

When a regular skirt-lining is made up separately and put inside the cloth the process of fitting the same is practically the same as that described for facing, except that the lining is carried up to the waist. It is always essential to secure it to the cloth at each seam, several inches above the foot edge, to prevent its dropping below should the skirt be lifted by the cloth alone. In most cases it is preferable to stitch the lining in with the material at the seams, down to within thirteen inches of the foot edge, where notch the lining turnings back so as to be able to continue the seam without a break through the cloth only. When pressing the seams open, it will be necessary to notch the cloth

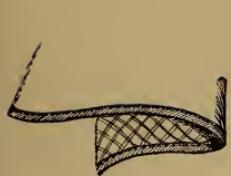


Fig. 1



Fig. 2

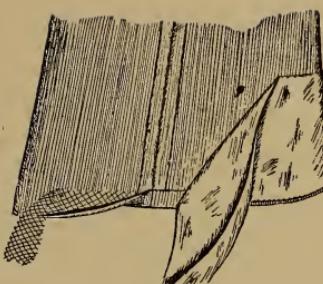


Fig. 3

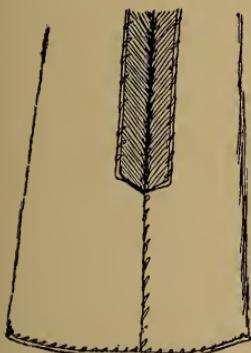


Fig. 4

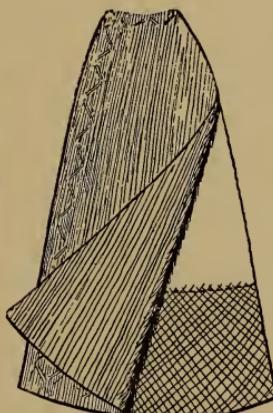


Fig. 5

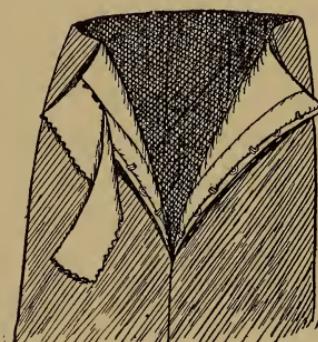


Fig. 6

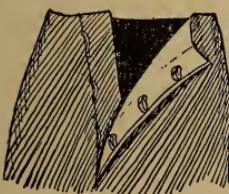


Fig. 7

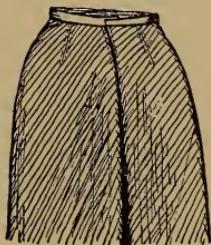


Fig. 8

SOME DETAILS OF SKIRT FINISHING

ones at the same place, so that they will slip under the lining edges, which latter can then be hemmed down each seam, and finished off round the foot edge, as already directed for the faced skirts (Fig. 4).

For thin materials stitch the seams, lining and material together, placing any required stiffening between the two, stitching its upper raw edge on to the lining before the latter is put to the material; Fig. 5 illustrates this, and also shows the tacking down of the sides, which must be done with the material uppermost, and smoothed on to the lining. When the seams are stitched up, a facing may be put in to any desired depth, as in Fig. 3, except, of course, omitting the two-inch-wide strip of muslin, as the stiffening already has been placed in the skirt. We have said nothing so far about braid or bias velvet to protect the foot edge. If the former is used it should be doubled, and simply run inside the skirt edge so as to come very slightly below the latter. If bias velvet is used, it is neater to run one edge under the edge of the skirt, and to lay the other under the facing, so that the hemming of the latter makes a neat finish.

On Making Plackets

Where to place a placket has been a vexed question of late, and the more or less plain skirts have made it indispensable that the placket should be made as invisible and as secure when fastened as possible. Many women overlook the fact that even where there is a fair amount of fulness in the back of a skirt, almost every movement will reveal the petticoat underneath, unless the placket be

DETAILS OF DRESS FINISHING

properly secured. No placket is properly made without a "fly" as well as a false hem under one, if not both edges. It should almost invariably be made at a seam, and finished off so that the break is invisible. The best plan is to baste the seam in which the placket is to be made the whole way up. When removing the thread after stitching, and preparatory to pressing the seams open, carefully leave that portion in beyond the stitching (the placket part) and press it also; then remove the basting threads, lay a strip of muslin cut on the straight under each edge, taking care to *tighten* rather than *stretch* the latter. Hem or herring-bone the turning down, without allowing the stitches to show on the right side. Next sew curved hooks and eyes alternately inside both edges, so that when fastened they will be held quite closely together, and buttonhole the eyes with silk twist.

The fastenings must next be neatly concealed by a strip of ribbon or of lining, and a "fly" of the material (either selavage edge, or pinked out if thick, or double if thin) be secured under one edge, as illustrated in Fig. 6. To prevent the lower corner giving way, it is necessary to secure it by a small piece of cloth hemmed across the seam on the inside. A perfectly plain skirt may have the placket down the centre back seam, and yet be quite invisible if done carefully in the manner described, but it is indispensable that the hooks and eyes be as close together as for a bodice, and one of the various kinds of hooks that will not unfasten readily must be used.

Where the placket is quite covered it is only necessary to place a false hem under the upper edge, and sew a "fly"

on to the under one; then sew safety-hooks under the former, and straight eyes, or work loops, on the seam of the latter, as illustrated in Fig. 7.

Inverted Pleat at the Back of a Skirt

The front, sides and back require careful fitting. No darts should show in the front width, and, if possible to do the fitting at the seams, none are necessary in the side gores; but when these are necessary they should be as small as possible, taking up two small rather than one large one. In cases of slight irregularity of form it is often necessary to take up a dart between the gore seam and centre of back to make this part of the skirt fit well, but this must be determined after arranging the centre pleats.

The latter must hang so as just to meet easily the whole way down, without being held together in any way, and the under-fold on each side must be well up at the waist to effect this; if the pleats incline outward at the lower edge the whole back wants lifting up, and the shape is so far faulty; or if there is not enough width to allow sufficient depth to the folds at the hip-line, the pleats will not set nicely to the back, although it is quite a simple matter to cut a skirt back that will be quite plain at the waist edge, but which will hang in gradually deepening folds that commence at literally nothing at the waist.

When the pleats at the back are satisfactorily arranged, if there is any superfluous material from the waist to the hip-line at the sides, take it up in a nicely tapering dart without tightening it in the least, for this would be worse

DETAILS OF DRESS FINISHING

than the fulness, and be careful to slant the dart in an equally symmetrical line with the pleat edges down the centre and the seam of the gore, as this will make all the difference to the "expression" of the back.

Secure the folds down to the skirt for a few inches if desired, but for ornament more than anything else; but, although this serves to keep them nicely together, rest assured that if the pleats do not set without any such help in the first instance, they will most certainly soon get out of condition in spite of all the stitchings, elastics, or tapes. Fig. 8 illustrates the inner and outer sides of an inverted pleat-back. Too much emphasis cannot be laid upon the necessity for arranging back pleats so that they meet easily and without suspicion of stretching over the hips. A good plan is to baste the edges of the pleats once the "hang" is secured, and press well.

Chapter XXII

MAKING A SET OF MUSLIN GARMENTS

MANY girls who will spend an infinite amount of patience on other kinds of needlework will not attempt what in Scotland is collectively called "white seam," thinking it to be too laborious. As a matter of fact, to make under-garments prettily is very fascinating work, as those whom

I hope to induce to make a trial will find. The nightgown shown in Fig. 1 is one of the pretty semi-



Fig. 1

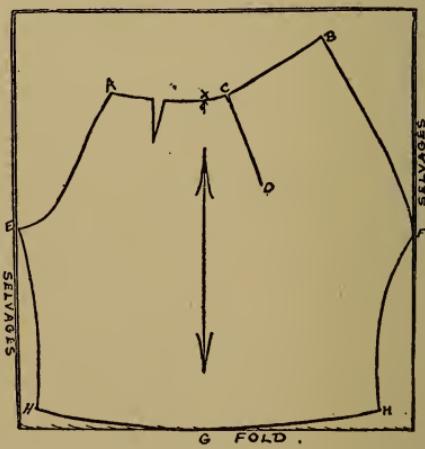


Fig. 3

MAKING A SET OF MUSLIN GARMENTS

low-neck patterns, easy to make, and lends itself to a display of dainty workmanship in the yoke, which is in the front only. The illustration shows it with insertion strips, alternating pieces of tucking, placed so that the tucks slope diagonally. A fly-piece for the button-holes is put on under the right edge of the front opening, and a false fly is added to the left one to carry the buttons. The lower part is gathered and secured to the yoke edge; the turnings are cut as close as is permissible, and a narrow band of the muslin is laid over them and feather-stitched. A similar band with a lace frill finishes the neck edge, the back of which is gathered along the centre. If preferred, short tucks may be substituted for the gathers at back and front, in which case those in the front should be only about two inches and a half deep in the centre, graduating to one and a half inches.

The sleeves have only one seam, are gathered over the top to set into the armhole, and the lower edge, also gathered, is stitched into a narrow band to match that at neck, to which a frill of muslin edged with lace is added. Beading with ribbon run through it may be used instead of the plain band in each place if preferred. Five and a half yards of thirty-six-inch-wide muslin are required for this gown; two yards of insertion if used as in the illustration, with

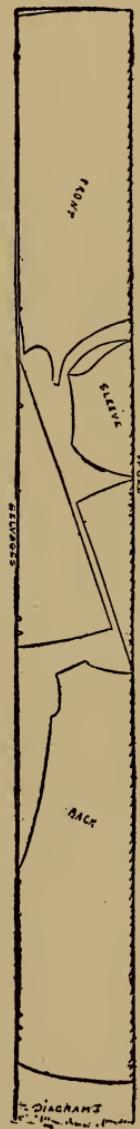


Fig. 2

tucked muslin let in between the bands; and three yards of lace edging.

Cutting the Garment

Fig. 2 shows how to place the several parts of the pattern on thirty-six-inch-wide material folded down the centre of the width. The front is wider than the back, but both require gores added to the sides to make the necessary width for the skirt of gown; if jaconet or mull should be used, both of which are wider than ordinary muslin, smaller gores will be needed, and there will be a saving in the quantity of material. The centre-back and front edges of pattern are placed to the fold, as also that of the sleeve, which latter should be cut to the higher edge at the top only at front. The gore for the back is placed to the fold for convenience of cutting, and it must therefore be divided. The second sleeve is cut out of the remnant of cloth which is allowed for in the estimate of quantity. When both are cut, open them out, place them together, and slope out for the under-arm curve. Make the seams as neat as possible by cutting the turnings away—one to a little less than a quarter-inch, and the other a little wider to turn under, so as not to have to turn both, which makes a thick and ugly seam.

The drawers (Fig. 3), which require two and an eighth yards of thirty-six-inch muslin, are a new shape, with no fulness round the waist except at the middle of the back; very comfortable and comfortably wide around the knees; they are made to open at the sides, otherwise points A, B, E, and F must be thrown out some few inches to give extra

MAKING A SET OF MUSLIN GARMENTS

width, and the top edges at point A lapped when finishing the top. By following the instructions any one can cut out the pattern.

How to Cut a Pattern

The long arrow down the middle of Fig. 3 represents the fold of the pattern. If the knee edge is doubled and both sides placed exactly together, the various points are all measured from that line, to right or left, as follows: A is eight and a half inches from and a half-inch above X; B is ten and a half inches from and four and a half inches above X. Notice there is a slight downward curve from A to X, and a dart is taken up between the two. Line C to D is the opening; C measures two inches from and a half-inch above X; D is eight inches down and five and a half inches across from X; E is seventeen inches, F eighteen inches, across, and both twelve inches down from X; G is thirty inches (or less if required shorter) straight down from X; and each H is two inches above and sixteen inches from G. Cut the upper and side parts first, and then fold the pattern on the arrow so that H dots meet, and cut to G through both thicknesses. It will be seen that the line F to H is longer than that from E to H on the opposite side; be very careful to place opposite points to meet, and ease the extra length into the top two inches of the seam. Stitch and fell all the seams, including the darts in the front; add a fly flap on the front edge of opening (cut from C to D), and hem a false hem under the opposite one. Gather the back for about three and a half inches on each side of B, running a second row

of gathering at a quarter-inch below the first; stroke the gathers carefully.

Sew the edge A to C to an inch less of muslin cut on the bias, easing slightly toward the centre; hem the strip along on the wrong side, and sew buttons on the right sides at the ends.

Run the edge, B to C, to another strip of muslin, of such a length that when buttoned the waist will be at least two and a half inches larger than the correct size; hem it as before.

It is quite flat if finished in this way; there is no ridge of a shaped band, no bunchy fulness below the waist, and the garment drops about an inch lower than the waist-line. Make the frills for the knees as desired, and join them to the edges of garment after running the three tucks in the latter, as illustrated in Fig. 4; the join is concealed by a beading through which ribbon is run and tied at the side. For the frill allow for fulness from a quarter to half as much extra as the width round the knee.

A Corset-Cover

To many girls the pretty corset-cover shown in Fig. 5 will be quite a novelty. It is composed of two hem-stitched, embroidered handkerchiefs, each cut in half diagonally, and one half divided again; these pieces are joined together by lace insertion, which also trims the front edges, little bands of muslin being added for the buttons and button-holes and to hold the insertion. A muslin beading through which ribbon is run finishes the waist; a narrow lace beading

MAKING A SET OF MUSLIN GARMENTS

run with baby-ribbon joins the lace frill to the insertion at the back and to the armholes. One half handkerchief, with circular pieces cut out, forms the upper part of front and back on each side of the bodice; the other half forms the lower part of the back, and the two quarters each a lower part of half the front, as illustrated in Fig. 6. The neces-



Fig. 4



Fig. 5

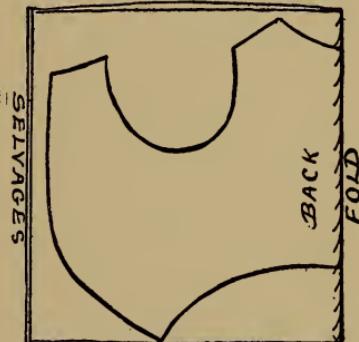


Fig. 7

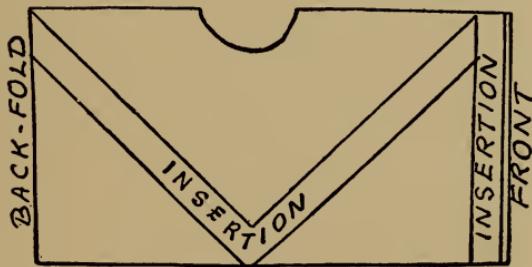


Fig. 6

sary quantities for this corset-cover are two handkerchiefs (twelve inches square for a small, medium size), two and three-quarters yards of lace edging, three and a half yards of insertion one and three quarter inches wide, three-

HANDY-BOOK FOR GIRLS

quarters of a yard of muslin beading one inch wide for waist, two and a half yards of narrow lace beading, one and one-quarter yards of three-quarter-inch ribbon, and three and a half yards of baby-ribbon.

This would be a very pretty present for a girl to make for a friend; the same pattern as formed by the outer lines may easily be used for a corset-cover made of plain thin muslin, ready tucked and embroidered muslin, or of any of the various prepared transparent materials. Another plain corset-cover may be made by opening the shoulders of a fitting bodice lining, all the other seams being stitched up, and cutting it all in one piece by placing the centre back edge to a straight fold of the muslin, as shown in Fig. 7, when the front will come on the bias. The front edges may be either hemmed or set into narrow bands for the buttons and button-holes, which is rather the better way, as the bias edge may then be eased to the band, which makes the bodice fit better. A pretty fancy is to tie the fronts together with bows of narrow ribbon instead of having buttons. The top should be finished with a narrow beading and ribbon and a wider one at the waist.

Chapter XXIII

MAKING FANCY APRONS

EVERY now and then some garment which had been relegated to the past returns to favor again, but always with some modification to suit the taste of this more artistic age. The apron, for instance, which had been looked upon for some time as an article of utility merely, has now become a thing of beauty, and as it is also useful it ought never to be allowed to pass out of style.

As a dainty gift the fancy apron is receiving marked attention, possibly because it is shown in such fascinating styles and is so well adapted to the needs of the period. There are not only the aprons for home wear, but little novelties for office use, such as the stenographer's apron, etc. The latter is very useful for protecting the dress, and although it should be made in a thoroughly practical manner, yet a touch of daintiness should be given it which will add to the otherwise plain effect of the business-suit required.

Chafing-Dish Aprons

The style of apron that perhaps appeals most strongly to the feminine mind is the dressy little affair for afternoon

wear, or for serving at chafing-dish parties, teas, etc. (Fig. 1). It may be made as elaborately or as simply as one chooses, provided the material be fine, dainty, and neatly made up.

Appropriate materials for fancy aprons are sheer lawns, muslins, and handkerchief linens, used in combination with lace insertions, edgings, and wash ribbons. Swiss muslins and organdies in delicate colors, with lace ruffles, are exceedingly pretty and easily made, requiring little trimming, as the material is sufficient in itself.

A very dainty apron may be made of white muslin with large polka-dots, and the latter may be worked over with a light tint of cotton. The edge of the apron may be finished with a muslin ruffle and a beading through which ribbon is run, the ribbon also forming ties for the waist.

One remembers, perhaps, the quaint silk apron worn in former days. Now we see aprons of pongee, China, and other thin silks, with embroidery or trimmings of lace. A novel idea is to embroider one's initials or monogram on the apron.

A practical fancy-work apron is one with deep pockets. This may be made in one piece, the lower part being turned up to form a long pocket, which may be divided into sections. Linen and wash silks are as suitable as any material for an apron of this style, which will require laundering.

Very much of the artistic beauty of an apron depends upon its shape. Little round aprons are very dainty, and those cut with a quite sharp point in the front are exceedingly graceful. Many have little bibs, and some have bretelles. These dressy aprons should, of course, be small,

MAKING FANCY APRONS

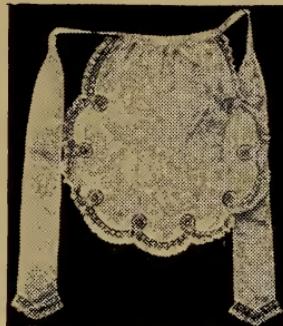


Fig. 1



Fig. 2

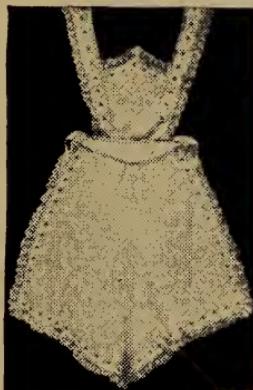


Fig. 3

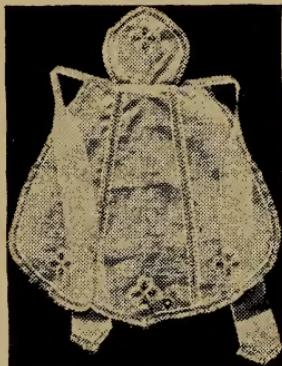


Fig. 4

reaching scarcely to the knees. If made longer, the graceful effect is lost.

Colored embroidery is quite the rage, and may be effectively applied to aprons. Cotton is, of course, the most practical material with which to embroider these. It may be obtained in very desirable colors which will stand laundering.

The few designs for chafing-dish aprons here offered in

styles that are attractive and practical require no vast amount of work in their make-up. One can readily carry out these ideas from looking at the cuts.

An Apron of India Lawn

The first apron (Fig. 1) is made of fine India lawn trimmed with lace insertion and edging, the insertion applied in scrolls, with wheels worked in the loops. The lace ruffle is made quite full. The pattern is traced on the sheer lawn, and the insertion applied in the following manner: It is first basted in place, then sewed to the lawn with very tiny stitches along its inner edge. A line of feather-stitching is then worked at the top of the insertion, the stitches extending just over the edge of the insertion. After the edging and insertion have been sewed together, the lawn is cut away from under the scrolls, turned back, and hemmed to the under side of the feather-stitching. The feather-stitching is worked with embroidery cotton and the wheels with linen thread. When stitching, start at the belt on each side, working down to the middle of the apron's lower edge. A line of feather-stitching covers the joining of the belt and apron, and the ends of the strings are feather-stitched and trimmed with lace. This design is equally pretty for an apron made of silk or linen trimmed with torchon lace.

A Pointed Apron

A little pointed apron made of white lawn has an embroidered medallion inserted in the point (Fig. 2). There

MAKING FANCY APRONS

is a band of lace braid around the medallion, and the two are fastened together with a few simple lace stitches. A line of feather-stitching is worked over the edge of the lace braid and a circle and scrolls of eyelets, joined together with stem-stitch, complete this decoration. The medallion and lace braid are inserted in the same manner as described in the directions for making the first apron. A ruffle of muslin embroidery and a beading through which pink ribbon is run finish the apron, and there are long ribbon ties. A row of feather-stitching is worked along the edge of the beading. The stitching and eyelets are worked in mercerized cotton (letter E is a suitable size). The fulness at the waist-line is adjusted by a row of tiny hand-run tucks, the tucks graduated in length from the middle to the side. A very dainty little apron may be made after this model, using a few butterfly medallions for decoration.

A Colored Apron

On another apron (Fig. 3) colored embroidery is used with good effect. This style of apron is now very popular, and it is extremely pretty for afternoon wear. It serves so well to dress up and protect a plain shirt-waist suit, and the bit of bright color used in the embroidery is very attractive, especially if the apron be worn over a dull-colored gown. The model is made of quite heavy white linen. The feather-stitching is worked with a light shade, and the dots with a deeper tint, of salmon-pink embroidery cotton. The simplest form of feather-stitch is used, and the dots are raised by working them twice over. Linen torchon lace is

used for trimming the edge. One of the chief recommendations of this apron is that it is made of such durable materials. If one desires a more elaborate apron after this pattern, fine muslin and Valenciennes lace may be used. A white pongee with colored embroidery would be very pretty. Attractive colored aprons may be made, using chambray or light-weight linen trimmed with linen lace, the embroidery done with white mercerized cotton. Cream crash and écrù linen trimmed with lace of the same color are quite effective, and on these the colored cottons show to advantage. These colored aprons are most useful to the young housekeeper. A very pretty apron for a child may be made after the style of the model, the apron part, of course, being full and made straight across the bottom.

A Fitted Lace-Trimmed Apron

The fourth apron (Fig. 4) is made from an unusually well-fitting pattern, one that lies perfectly smooth at the waist-line. It is made with three gores, the gores fastened together with lace insertion and edging. At the bottom of each gore is inserted a little lace flower. The gores are first hemmed (a very tiny hem) down the sides, and the lace is sewed on so far as to just cover the hem. The outline of the flower is traced on the lawn and the lace is basted in place, then sewed along its extreme outer edge to the lawn. After the wheels are made in the loops the lawn is cut away, leaving just enough seam to be turned in toward the lace and hemmed down. An apron of colored lawn in this style, with white lace, is charming, or white with yellow lace makes a pretty contrast.

Chapter XXIV

HOME MILLINERY

THE main points of millinery work are easily acquired with a little care and patience, and a girl who will give this care can have much prettier hats for the same cost than the girl who will not. As to fashions, they change, but the fundamental rules remain the same.

You will notice that some seasons all hats have bandeaux. The hair must be wavy and full, and the hat, large or small, must set well up, so that the coiffure may not be crushed. Again, no bandeau is used.

To make a covered turban, the brim-piece can be cut all in one, then folded over the edge, one cut edge plaited into the head size, the other caught down outside against the base of the crown after this has been covered.

Fit a piece on the top of the crown first, allowing one-half inch to turn over the side, which sew down with a long back-stitch; then fit a strip around the side crown, turning one-half inch in level with the top of the crown. Sew joins of both brim and side crown on the left where the bow comes.

The silk must all be on the bias, the brim-strip measuring across enough to come from the head-line outside to inside

the crown, and in length the measure of the edge wire plus a turning in under the bow. In joining two bias strips take care that both shade the same way. Pull the side crown-piece so tight that it will cling; it should need no sewing except at the join. Such a hat will require one and one-eighth yards of silk with a heavy corded weave. A good bow will take three yards of ribbon.

A bandeau may be used or not, according to the wearer's fancy; if used, a bow or rosettes of the ribbon will be needed at the back.

If made of liberty silk shirred, the brim and top of crown only need to be gathered. The work may be flat runners, pin tucks, or deeper tucks; if flat, it must be of bias silk; for tucks it may be bias or straight. Take the same measurements as for the plain coverings, *then add to this* for the tucks or fulness desired; and when all runners are *finished*, draw up to shape, pin on frame, adjust the fulness, and sew on; last of all, fastening off all the runner threads.

The lining must go into the hat before the bandeau, unless this takes the place of the crown. Linings are put in in two ways: in felt and straw hats the stitches may be taken through, a tiny invisible stitch on the right side and a half-inch-long stitch inside; a velvet or silk hat, or one that has a facing of velvet or silk, has the lining put in with a "top" or "pick-up" stitch (Fig. 1). Measure off a strip of silk one inch longer than the circumference of the crown and two inches deeper than the depth. Along one edge run a narrow hem for the draw-ribbon. Begin at the back of hat, holding the lining with the raw edge just inside the turn of the crown; when sewed all round in either

HOME MILLINERY

of the methods described, join up at the back, and run the ribbon into the hem with a short tape-needle; sew it at the middle so that it cannot be pulled out, and cut off an inch beyond the lining at each end; do not draw it up till the hat is trimmed, but fold the lining down and put in a few

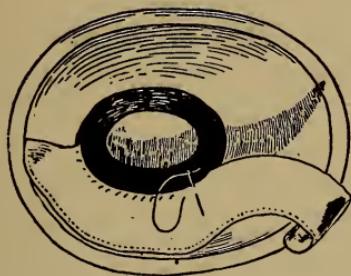


Fig. 1—PUTTING IN THE LINING



Fig. 5—MAKING LOOPS

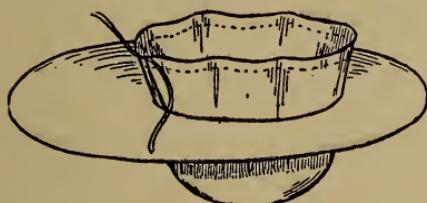


Fig. 2—GATHERING THE LINING



Fig. 3—AN ALL-AROUND BANDEAU

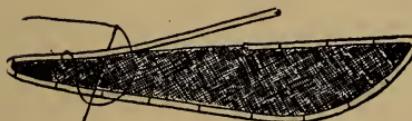


Fig. 4—A SIDE BANDEAU



Fig. 6—MAKING A RIBBON BOW

HANDY-BOOK FOR GIRLS

pins so it will be out of the way while trimming, as the hand has to be put inside the crown (Fig. 2).

Now pin the bandeau in with large bead-head pins, try on till the most becoming effect is obtained, then sew with a strong thread and long stitches *inside*, hiding those that must come outside. Now sew on the trimmings.

Bandeaux are usually necessary. They are of any form that the shape and garniture may necessitate, but usually the all-around bandeau (Fig. 3) is most used. The band may be perfectly straight, or it may be shaped like the side of a sloping crown, and in either case it may be and usually is made deeper in one part than the other.

If the head size of a hat is too large, it can be reduced to a fitting size by the bandeau; if it is too small, it can be enlarged by a sloped bandeau set in with the widest curve out.

Having cut your bandeau out in buckram, sew wire around the edge with a long button-hole or "blanket" stitch, lapping the ends two inches and sewing very firmly (Fig. 4). The band is then bound with a narrow, double strip of thin interlining muslin, and it is ready to cover.

Bandeaux of all sizes and shapes, covered with black velvet, can be purchased ready to put in, and also the buckram forms which one can cover with velvet to match the hat.

If the bandeau is straight along one edge, a strip of bias velvet can be folded over the straight edge and cut to shape on the curved edge with one-quarter-inch turnings; turn over and sew one edge, then pin and slip-stitch the other the same as in the fitted covering.

HOME MILLINERY

Home millinery has been made easy by the ribbon departments of the shops making up bows of the ribbon purchased, but one often needs to use what one has, and knowing how is a great advantage.

A very handsome bow, suitable for various shapes, may be made large or small, of wide or narrow ribbon. Of five-inch ribbon take three yards, more of narrower, unless a smaller bow is desired. The ribbon should be, if possible, all in one piece. Begin with the short end falling downward (Fig. 5), pinch it up four inches from the end, lay a loop upward six inches deep, now a short loop downward, then another upward a trifle longer than the first one. The end may be twisted around the bow and drawn through in a knot (Fig. 6).

Summer Hats

Much of the home-made millinery one sees bears unmistakable evidence of its make when, by a little study and effort, it can be so correctly done that it will not "tell tales," but will be equal to any Paris pattern, at probably less than half the cost. Summer hats are much easier to achieve than winter hats, and are dainty and interesting work.

As most summer hats are of straw braid, learning to sew the straw should be the first step. There are two ways of sewing braid: one is over a frame, the other without support of any kind, shaping the braid as one sews; but this is difficult and not to be attempted at first.

Select a becoming wire frame and the braid desired; if the braid is at all transparent, the frame must match, and as this is often difficult to obtain, an easy way out is to

HANDY-BOOK FOR GIRLS

get a little tube or pan of paint for a few cents, and with a camel's-hair brush tint the frame.

If the braid is very lacy, the frame will need also a covering of some very sheer material, several layers of tulle for fine horsehair, or tarlatan for silk, peroxeline, and such fancy braids. On these coverings the braids may be run to represent tucks or frills, or they may be run flat down.

Sewing braid on the frame is easiest for the beginner. If the braid is very soft and pliable, bind the edge wire with the first row, running the two edges together above the wire; cut and turn in the end when the beginning is reached. Begin the second row a little to the left of the first, which is usually at the back, but should be where the trimming will hide it. Lay the edge of the braid level with edge of brim, but sew a little below, so the edge goes free. Take a tiny stitch on the surface of the braid, hiding it under one of the strands that cross each other, on the under side. Stretch the edge you are sewing as much as is possible without breaking it. When the end of this row is reached the braid may be carried over the beginning and the next row continued round, if the braid is an inch or less in width; but if wider, it must be cut off, turned in, and sewed down neatly. In neither case should the rows lap each other more than only just enough to sew them together, and the edge should always be stretched. If the braid is stiff and will not stretch, hold it straight and firm so not a bit more fulness than is unavoidable is permitted at the inner edge of each row. This fulness must be reduced by running a strong, double thread into the edge and gently but firmly drawing it up so the braid conforms

HOME MILLINERY

to the shape of the frame; then sew on the next row, and catch as many stitches as possible to the wires.

If your shape has a brim of equal width all round, an equal number of rows will cover the brim; but if this is

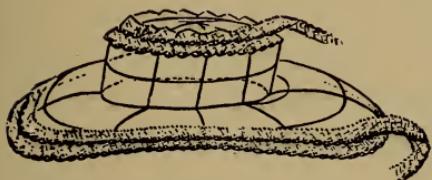


Fig. 7

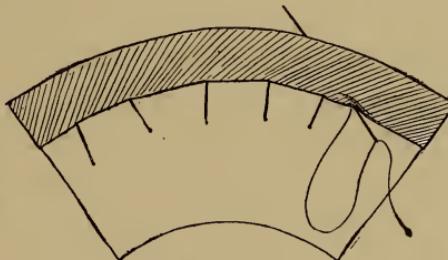


Fig. 10

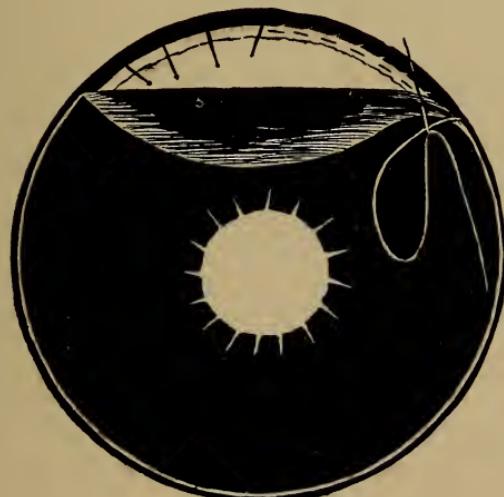


Fig. 8

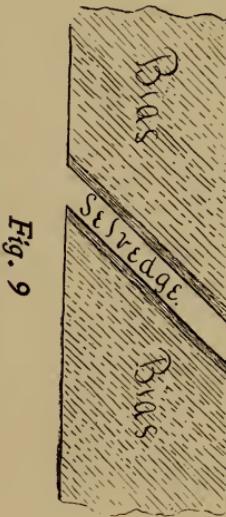


Fig. 9

wider on one side, part rows are set in at the last, filling in the extra space, the cut ends being turned up against the crown.

To sew the crown (Fig. 7), put a row around the upper

edge the same as the brim, set another row flat on top around the edge, passing the stitches *inside* the double row; go round in circles till the middle is reached, and finish with a neat twist.

To cover the side of the crown, put the first row close up against the top row, slip-stitching the same as the top, and go round and round till the brim is reached.

The under brim may be of straw braid, the same or a contrasting color; each row is "slip-stitched" on, the same as directed for the crown; or a facing of tulle folds or shirred effect of chiffon or silk muslin may be set under.

If the braid is stiff, the edge rows are sewed to the wire with a buttonhole-stitch, half an inch long, on the wire, and an invisible stitch on the surface, letting the braid project half an inch beyond the wire; then proceed as before directed.

If the braid is very stiff or brittle, so that it refuses to conform to the necessary circles without cracking, immerse it for a few minutes in water, wipe dry, and sew; very delicate colors may be wrapped in cloths wrung out of water and kept in this while sewing.

This is the method of proceeding to make a hat of velvet, plain, covered over a buckram frame, with a "mob" crown tied around the base with two twists of wide soft - finish ribbon, the two ends tied in a simple cravat bow across the front.

To cover the frame of this hat, take a pattern in paper of the brim exactly, allowing no turnings; cut out the head size also; mark pattern and hat correspondingly for back and front. If the shape is wider at one side than at the other,

mark also "right" and "left." Place the pattern on velvet, so the front and back come exactly on the bias line. This is obtained by folding the velvet over cornerwise, crease lightly at the fold, open, pin on pattern, and cut out, allowing one-half inch turning all around, and one inch inside the head size; snip this inch at three-quarter-inch intervals to the correct head-line. Unpin the pattern (after marking on the back in pencil or chalk corresponding to marks on pattern), lay the cut velvet face to face on another corner of the velvet, taking care to get the bias as before, and cut out, marking the back the same as the first piece. In this way there is no danger of cutting two pieces for one side, and by putting mark to mark it is bound to fit.

Next the frame edge is bound with thin crinoline cut in bias strips two inches wide. First a strip is folded to one inch wide; this is stretched around the edge and basted on below the wire; next another strip, left single, is stretched over the first. The first is to cover the wire, the second is to sew to.

Slip the top piece of velvet on over the crown; be sure you have the right piece, or it will not fit; pin in place, turn the half-inch margin over the edge, and pin to the crinoline binding—pins with *heads down* (Fig. 8); sew this edge to the muslin with one-quarter-inch stitch, passing the needle toward the edge. Now place the under brim in position according to the marks, pin all round at four-inch spaces, then turn in the edge level with edge of brim, pin closely as you go, *heads up*. The under edge is now "blind-stitched" to the upper one. Use No. 6 needle and A silk to match the velvet; the stitches must not be more than

HANDY-BOOK FOR GIRLS

one-eighth of an inch in length. Take your stitches *between* the two edges, first below, then above, and draw evenly close as you work.

The crown-piece is a round the same size as the brim-pieces; the edge is turned in and gathered round three times with three-quarter-inch spaces between. When done, pin this on the crown, the edge coming at the head-line; the three threads are drawn up, the fulness made even, though a little more may be thrown to the left side, and it is sewn on at the head-line. This makes neat the cut margin of the brim at the head-line; the inside snipped margin is sewn up inside the crown with the same line of stitches; the head-lining is put in next, after which the bandeau is set in.

Bandéaux of various shapes and sizes can be bought, ready to put in, from five cents to twenty-five cents each, and can be covered, if necessary, with a bit of the velvet like the hat.

The bandeau and hat should be adjusted on the head to get the correct pose, as the entire effect may depend on this.

To put on a binding, cut two bias strips of velvet (you can buy them so) four inches wide *through* the *bias*; that will be one-third of a yard on the bias cut in two strips. Join two ends together, first cutting off the selvages, back-stitching with one-quarter-inch turnings. Take care in joining that the strips both shade the same way; one end is always right and one wrong (Fig. 9). Measure around the edge of the hat, cut enough off from the strip to make it measure four inches less than the edge, cut the end in

HOME MILLINERY

line with selvage, and join the two ends. Slip this ring over the edge of the hat (which should have been previously wired and bound just as was the first frame); let the middle of the strip come at the edge of the brim, with both joinings at the back. Have it of equal depth above and below; turn in the two edges and pin and "blindstitch" to the hat, passing the needle through the brim back and forth, "blinding" down each side with alternate stitches (Fig. 10). In putting the lining in a felt hat the stitches may be taken through, one-half inch long inside, invisible outside.

Chapter XXV

EMBROIDERY FOR GIRLS

THERE is lying beside me on the table as I write a sampler, worked in pink, green, blue, and dull purple-red silks, on which I read these wise sentences: "Order is the first law of Nature and of Nature's God," "The moon, stars, and tides vary not a moment," and "The sun knoweth the hour of its going down." Below, inclosed in a wreath of tambour-work,¹ are two words, "Appreciate Time." Under the first four alphabets (there are five in all) comes the date, "September 19, 1823," and in the lower corner another date, "October 24," when the square was completed, with the name of the child who wrought it, long since grown to womanhood, and now nearly forty years dead, but there recorded, in pink silk cross-stitch, as "aged eight years."

And these dainty stitches, set so exactly, assure me that the girls for whom I write are not too young to embroider neatly. Will you let its two mottoes remind you that a few moments carefully used each day will make you as

* Tambour-work is a chain-stitch in which the thread is drawn up through the cloth by a hook. Muslins and thin cloths used to be embroidered in this way.

good needlewomen as your grandmothers were, and that your work boxes or baskets should be in such order that you can find your thimbles in the dark, and can tell each special shade of silk by lamplight? But I leave you to apply the mottoes for yourselves.

If you are to begin work with me, will you buy a few needles and two or three shades of silk, of any given color, such as old-blue, dull mahogany, or pomegranate-reds, or old-gold shading into gold browns? These are colors that will always be useful.

First your silks must be prepared so they can be kept clean. Cut the skein across where it is tied double, and with a bodkin



Fig. 1

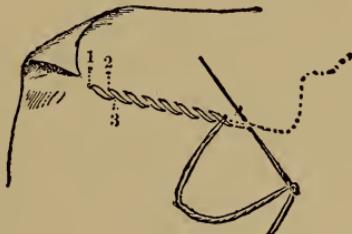


Fig. 2

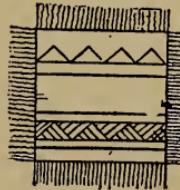


Fig. 3

and string, or with a long hair-pin, draw the skein into its case. This case (Fig. 1) is made by folding together a long piece of thin cotton cloth a foot wide, and running parallel lines across its width half an inch or so apart. When the

silks are drawn in in groups—reds, blues, greens, yellows, each by themselves, carefully arranged as to shades—cut the upper end so you need not be tempted to use too long needlefuls, and there your skeins are neatly put away, and soon you can distinguish any shade by its position in the case, no matter how deceptive the lamplight may be. Still, you will not need your case till you have a dozen different colors. If you buy your silks at first by the dozen, which is the cheaper way, be sure that your pinks, blues, greens, etc., have, so far as may be, a yellowish tone. Remember that yellow is the color of sunlight, and that without it your work will look cold and lifeless; and always avoid vivid greens and reds.

First learn the stem-stitch, and you can practise on any bit of coarse linen or crash. Draw a line with a pencil (see dotted line, Fig. 2); then put your needle in at the back, bringing it out at 1; then put it in at 3, taking up on the needle the threads of cloth from 3 to 2, so making a stitch that is long on the upper but short on the under side of your cloth. The needle points toward you, but your work runs from you, and you put in the needle to the right of your thread. When you wish a wide stem, slant your stitches across the line; if it must be narrow, take up the threads exactly on the line, or you can make two or more rows of stem-stitch where you wish the line broadened.

Stem-stitch can be used by beginners in many ways. Squares of duck, fringed out on the edges, and overcast or hemstitched, can have simple borders or stripes of any desired width worked in this stitch (Fig. 3). You can draw the lines yourself with a pencil and ruler; those lines which

EMBROIDERY FOR GIRLS

slant in one direction may be worked in one shade, those slanting in the opposite direction in another shade. The heavier lines can be worked with double thread, and these squares make very pretty tides to protect the arms of chairs. Figs. 4, 5, and 6 are set patterns that can be used

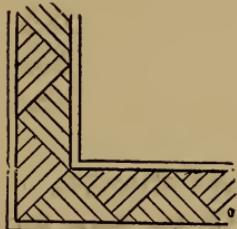


Fig. 4

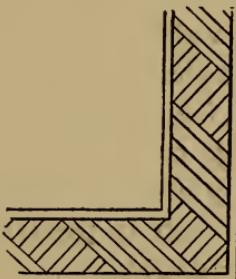


Fig. 5

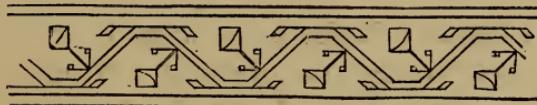


Fig. 6

for borders upon doilies, towels, or table-covers. They should be worked with silk, fine or heavy, according to the quality of the linen or other stuffs used. Stem-stitch is the foundation of good modern embroidery, and we must not go on with the building until this foundation is laid.

Outline Pictures

Whenever you find any pretty outline pictures, whether figures, flowers, or little slate pictures, see if they can be used for stem-stitch embroidery. They are just what you

want for doilies, and it will be much pleasanter for you to find your own designs. Doilies can be cut from eight to twelve inches square, and they should be worked and pressed before fringing. Doilies for common use are made of coarse linen or duck, white or gray, and are worked in silk or embroidery cottons. Either red, blue, or brown cotton will wash well. Dainty doilies, only intended to keep very choice china from being scratched by the finger-bowls, are made of exquisitely fine linen, first washed to remove the dressing, and wrought in silks that have been scalded. Fine sewing silk, a single strand of letter D button-hole twist (this silk is twisted of three strands), or a single thread of "filoselle," or filling silk, are good for this work.

For your first half-dozen doilies in coarse linen or duck, get your little sister's set of slate pictures: a coffee-pot, a clock—any picture will do, no matter what it is, so long as the lines are few and simple, and tell their own story. You want every one to see instantly that your pear with two leaves is a *pear*, and not a pumpkin. Of course you cannot see to trace the design through your thick linen, so trace it off neatly on a piece of thin paper, and prick the lines of your tracing carefully with a fine needle. Place this pricked pattern, rough side uppermost, in the middle or in one corner of your linen, just where it will look best, not forgetting to allow for fringe. Then rub a little charcoal powder over the pricked pattern with a wad of soft cotton-wool. Lift off the tracing carefully, and follow the dotted charcoal lines with a soft, sharp pencil or with a pen dipped in liquid bluing. Don't smudge your work by resting your hand on the charcoal powder. When you have

EMBROIDERY FOR GIRLS

drawn over all the lines, blow off the powder, and rap the linen smartly on the back two or three times to get thoroughly rid of the charcoal. If you know how to draw, so much the better; trust your eye, and do away with tracings altogether.

The coarse pictures of which I have been speaking look best when worked in but one or two colors at the most. If you like Japanese pictures, as I hope you do, you can make a set of birds (Fig. 7), worked all in one color, or of



Fig. 7



Fig. 8

little figures (Fig. 8) in bright-colored silks. You can find such designs in Japanese drawing-books for sale at the Japanese shops, on advertisement cards, or on fans.

The New England Stitch

The Pilgrim women who sailed in the *Mayflower* brought with them the very old stitch, a magnified view of which is given in Fig. 9. I have seen a picture wrought by one of these same Pilgrim mothers—rows of houses and trees

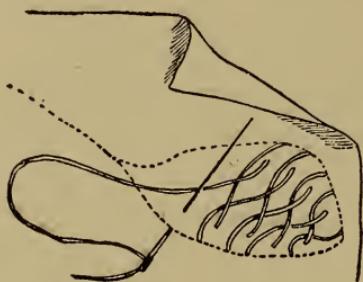


Fig. 9

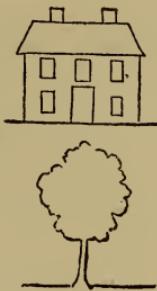


Fig. 10

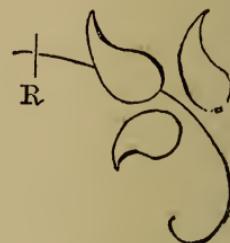


Fig. 13

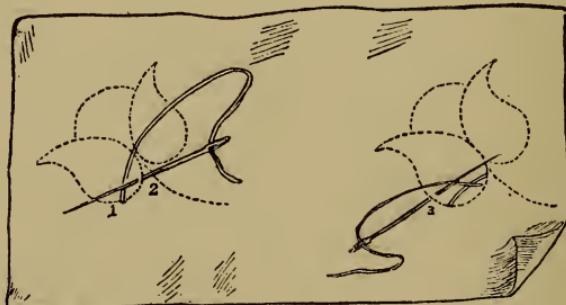


Fig. 11

something like Fig. 10 (you could any of you draw better), with a meeting-house in the middle; but the houses and trees were a marvel of crewel-work, the background of silk, all in this ancient stitch, which is also found in old Persian and Turkish embroidery. I know an old lady who has used it from her childhood, who calls it "pocket-book" stitch; it is really a kind of "fagotting," and there are remnants of old petticoats and curtains still to be found in out-of-the-way country towns of New England, exquisitely worked in this most economical of stitches, which, for convenience, I shall call the New England stitch. Turn the work over and

EMBROIDERY FOR GIRLS

you will see how economical the stitch is: all the silk, except just enough at the outline to catch in the stuff, shows on the upper side. By pushing your needle first toward you and then from you, as seen in Fig. 11, you get that pretty twisted look which you see very much enlarged in Fig. 9.

The design here given (Fig. 12) is suitable for a bureau-cover or curtain. For a bureau-cover take Russia crash, allow twelve inches to hang over each side, *besides* enough for fringe. Three flowers like the two in Fig. 12 are enough for crash of ordinary width. Trace off the pattern on a piece of paper, repeat the left-hand flower at X, stopping at R, and omitting the spray marked S.



Fig. 12

HANDY-BOOK FOR GIRLS

You can finish off the stem at R if you prefer. When your pattern is all ready on the paper, trace it on the crash, in the middle of the twelve inches, according to directions given on page 256. This can be worked according to the directions given below, in New England stitch, or in three shades of one color, in either New England or stem-stitch, following the same gradations of color.

Colors

A, very light yellow-green; B and C, darker shades; *a*, very light salmon-pink; *b* and *c*, darker shades; *l*, light yellow; *n*, old-gold; *m*, an intermediate shade of yellow.

Every other flower might be worked in old-blues.

Darning Backgrounds

One of the most exquisite pieces of embroidery I ever saw was brought from the Royal School of Art Needle-work at South Kensington. This was a sofa pillow of soft, yellow India silk, with the design outlined, and the rest of the surface darned back and forth in a rich old-gold color. A few lines of pale pink veined the petals, and there was a narrow border of dull golden-brown that inclosed the whole. The only stitch used was simply an irregular darning stitch. The work was so charming and so easy that any young girl would enjoy doing it. It would be a very pretty way of embroidering work-bags. Something near the color of a light-yellow nasturtium would be best. Get a piece eight inches square, trace on it the design of Fig. 14, and back

EMBROIDERY FOR GIRLS

the silk with a piece of soft, very thin unbleached muslin, and overcast the edges. Buy a skein or two of old-gold filoselle of a somewhat darker shade than your silk, or a good bronze-color that harmonizes well with it. First run the outline of your flowers in the dark yellow or bronze, and the shading lines, taking up but few threads of the



Fig. 14

HANDY-BOOK FOR GIRLS

silk with your needle, so that the outline will show strong and plain on the surface. Outline the leaves and stems in a dull, not too dark, green. Take two or three threads from a strand of filoselle in your needle at once, and do not take too long a needleful. Then darn the background back and forth, making the threads run parallel to each other, but with constant variation as to the length of stitch and the closeness of the lines.

The background could be darned in slightly varying shades of yellow. The irregularity in stitch, in closeness of the lines, and in shade, all help to give the work a very antique look. A narrow border can be darned all around of another color that will not contrast too sharply with the flowers or the background.

General Principles

The stitch is not the all-important part of embroidery. No matter how even and true the stitches, if the color or design is poor, the work will not be artistic. You wish any one who picks up your work to know at a glance that it is not the handiwork of an ignorant girl, but of a cultivated little lady, and it is by the design and colors you choose that you show whether your eye and taste have had good training.

Silks

The greens of nature are a great deal grayer and duller than those you will be likely to choose at first. As for design: In the shops you will find, perhaps, stamped on a

EMBROIDERY FOR GIRLS

single table-cover daisies, buttercups, cat-tails, clover, wild roses, and grasses, a confused and irregular mass; leave out all but one, keep your clover, for example, and only the leaf of that. Take a real clover leaf, lay it on a piece of paper, and trace it off, with a closed leaf perhaps crossing the stem; then stamp a row of these, three or four inches apart, across the ends of a piece of crash or linen for a little stand-cover, and draw lines for a finish above and below, as in Fig. 15. Match the color of the leaf as nearly

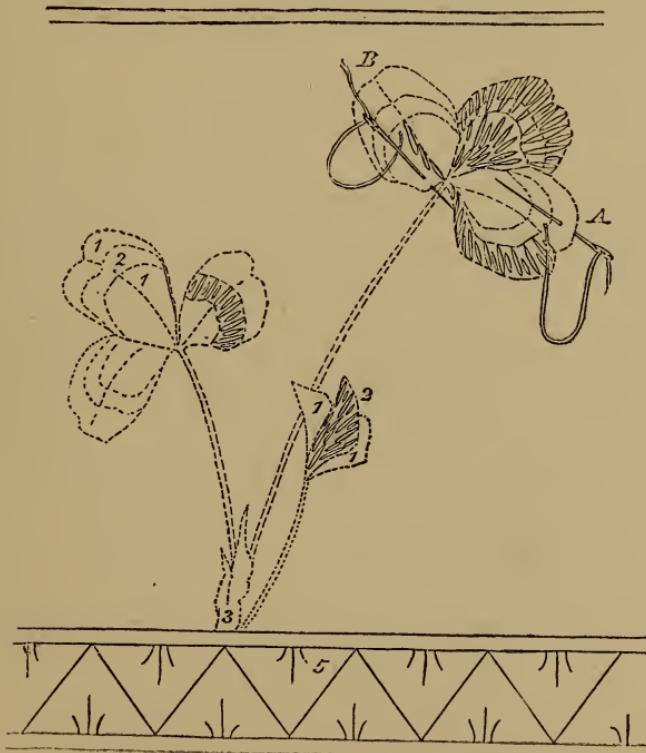


Fig. 15

as possible in silk, and then work around the outer edge of the leaf, taking a long and then a shorter stitch (see A), so that the stitches will be even on the edge of the leaf, but irregular on the inside, and all point toward the stem; leave the light space, and beginning at the stem, work a few lines of stem-stitch radiating from the stem, with a few extra stitches filled in where the lines spread apart. A good way to fill in these extra stitches is to bring the needle back, pointing toward the stem as at B. Afterward fill in the light space by putting the needle in and out, pointing the stitches toward the stem, but taking them irregularly according to the space.

Simple Patterns

For a plain bureau a scarf covering is perhaps as pretty as any, and it should be embroidered at the ends, or some simple figure could be scattered over it. But for bureaus that have boxes on either side a square or oblong piece of crash or round-thread linen is the simplest and most useful cover, as it can be readily washed; and this, with a cushion cover to match, any young girl can make. Nothing is required but a piece of crash of a quality costing about twenty-five cents a yard, and a few soft shades of floss. Cut the linen exactly the right size to fit the opening before the glass; allow an inch for fringe if it is to be overcast or hemstitched, an inch and a half if tied in tiny knots, which can be made easily with the aid of a crochet hook. The fringe should be unravelled out last of all, after the embroidery is completed. Draw in the four corners the designs 1, 2, 3, and 4 (Fig. 16).

EMBROIDERY FOR GIRLS



Fig. 16

Work the border lines and stems in stem-stitch, the leaves and flowers in long stitches, letting the stitches run in the direction of the shading lines. The pin-cushion cover should be made in the same way, with border lines, and design No. 5 in the centre, and it should be cut large enough, so that the fringe at the corners will touch the bureau. The whole should be worked either in three shades of one color,

or the border lines, leaves, and stems can be worked in three shades of olive or sage greens, and the flowers in pink, blue, and yellow. Let the outer bordering line be the darkest.

Pretty and useful tray-covers can be made in the same way of small pieces of crash fringed at the two ends or all

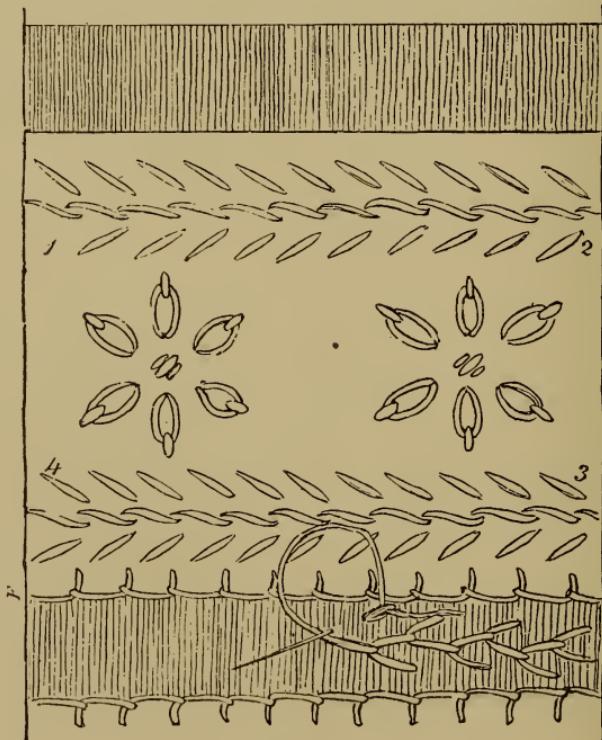


Fig. 17

around, with these little designs in the corners, but without the centre figure, which would be covered by the cups and without the border lines, which make a little too much color for table use. The more carefully the fringe is finished, the

prettier the work will look. Press on the wrong side with a warm iron, laying the work over folds of soft flannel.

A Chinese Design

Among a collection of articles that had been brought from China, I once saw a beautiful scarlet cape. It was stiff with embroidery, which seemed at first sight to be very elaborate and difficult; but on examining it I saw that the intricate pattern, which went waving and curving all over the garment, was all wrought in the simplest of stitches—so simple, in fact, that a mere child might have done it.

First a line was worked in stem-stitch, as at the line 1, 2, in Fig. 17, and then stitches were taken each side of the line, giving a feathery effect, as seen in Fig. 18.

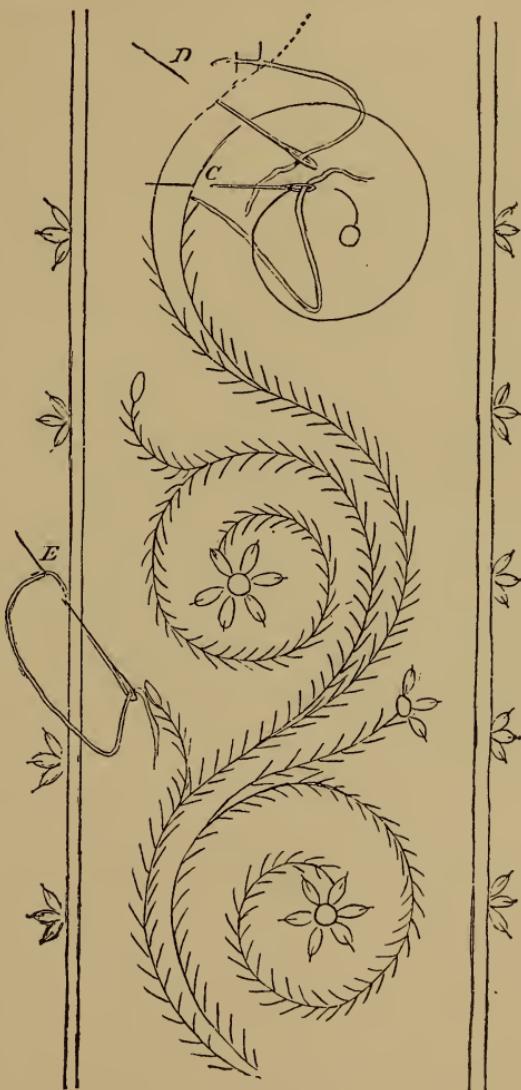


Fig. 18

HANDY-BOOK FOR GIRLS

These stitches should be taken first on the right side of the line, making a long stitch on the upper side of the cloth and a short one below, working from you, and then the stitches should come down on the left side of the line, working toward you, as shown at C and D (Fig. 18). I know of no stitch so easy as this, and none more effective for the amount of work. The petals of the little flowers are made by a single stitch, like a chain-stitch (E, Fig. 18), then the needle is pushed through the cloth and brought out on the under side, thus making a little point to each petal. This is the easiest and prettiest way to work daisy petals.

This design (Fig. 18) would be pretty for a border to a linen apron, worked in two shades of silk, the lines darker than the little feathery rays or flowers. It would also do well as a border for any kind of tea-cloth or bureau-cover, and could be worked very rapidly.

It should be an inch and a half or two inches from the edge, and it can be done by a girl ten years old as easily as by one of twenty, if the lines are only ruled, which can be done with a colored pencil (yellow), or with a piece of chalk.

Part IV

GIFTS

Chapter XXVI

HINTS TO SANTA CLAUS

AS the merry days of Christmas draw near, busy heads are teeming with plans for gifts. Every way one turns one hears: "What shall I get for So-and-so?" "Oh, do tell me what such a one would like?" A few hints regarding the choice of presents will not be amiss. One of the great points to remember is that the intrinsic value of a thing has little or nothing to do with the pleasure it gives. An expensive or showy article, which does not suit the individual taste of the recipient, does not give the pleasure that is yielded by a simple inexpensive thing that shows the loving thought and remembrance bestowed upon it by the giver. When selecting a gift, therefore, bear in mind the special likes and dislikes of the friend for whom it is intended. If the person's room be furnished in a delicate shade of blue, *don't* have any red on her present, no matter how much you may like the shade yourself.

Some of the articles mentioned below call for a design for ornamentation. Do not be discouraged if you cannot paint in oils or water-colors. A little gilt paint, or even pen and ink or sepia, will often answer the purpose just

as well. And as for designs, they need not be original. They can be found in any illustrated book, and should be chosen for their simplicity as much as for beauty. Even if you cannot copy them in any other way, they can be traced. Where mottoes are required, do them in gilt with a very fine brush, choosing an irregular type of letters, so that occasional slips will not be so evident. Where the mottoes are to be embroidered on ribbon or silk, trace the motto in lead-pencil first, and then go over the tracing with silk in outline stitch.

If your pocket-money is limited, silkoline in a delicate pattern will be just as pretty as silk, and plain brown linen may be often substituted for more expensive materials.

Button's Chum

This very useful sewing contrivance has for its foundation a piece of pliable cardboard, or, better still, buckram or canvas, which is covered with silk or ribbon. Its size should be ten by two and a half inches. Ribbon in two colors forms the prettiest effect. In the middle, near the top, sew a large hook, and on the opposite edge an eye to match, or form a loop of coarse silk. This eye or loop is intended to catch on the hook. On the part that turns up the words "Button's Chum" may be embroidered in fanciful lettering. Within the cardboard place a large spool of heavy linen thread. Run baby-ribbon through the spool, and tie it on the outside of the card. A few stitches must keep the baby-ribbon in position, otherwise the spool might be displaced when in use. Accompanying this gift may

HINTS TO SANTA CLAUS

be a bag of chamois or silk containing a number of the coarse buttons of which every one is constantly in need. (Fig. 1.)

A Toy for the Baby

For a baby an interesting toy may be made of walnut shells. Put the halves in pairs, and by means of small holes drilled in the edges with a hot hair-pin sew the

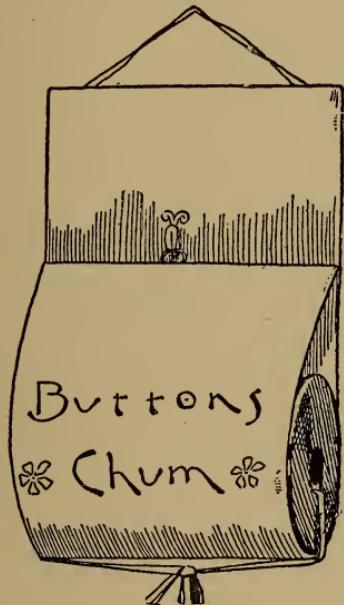


Fig. 1

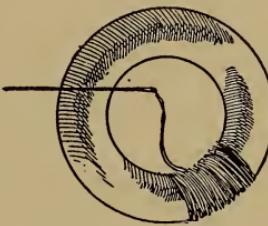


Fig. 2

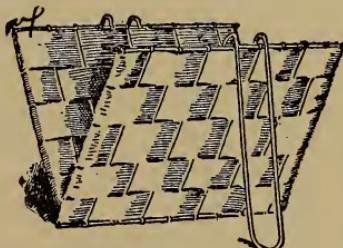


Fig. 3

halves together. Then through the middle of each nut thus formed drill a somewhat larger hole. Through this is passed a fine cord. As soon as a nut is strung on the cord, secure it in position with a knot tied in the cord. The intervals between the nuts may be long or short, ac-

cording to taste. If desired, a few jingling bells, such as are used for horse-reins, may be mixed in with the nuts. The ends of the cord should be securely fastened, and baby will have a necklace that he can jingle.

A Soft Worsted Ball

Another plaything for baby is a soft woolly ball for use indoors. Cut two circles of cardboard an inch larger in diameter than you wish the finished ball to be. Make in the centre a large circular hole. Supposing your circle of cardboard to be six inches in diameter, the hole should be about three and a half inches in diameter. Thread a needle with the largest double needleful of worsted that you can conveniently use. Lay the two circles together and sew over and over this ring. Two or three colors may be used. When one needleful is used, take another, and continue filling in the centre until it is really impossible to get the needle through again. With a pair of sharp scissors cut the worsted all around the edge of the cardboard. The ends will fly up into a fluffy ball. With strong twine, tie tightly round and round the middle, between the two pieces of cardboard; fasten the ends securely. Cut away as much of the cardboard as you can. The twine ought to be strong enough to keep the ball in shape, but a tiny rim of the cardboard may be left if desired. At this stage the ball will not be perfectly round, and will have irregular lengths of worsted protruding from it. Round the ball with a pair of scissors until it appears perfectly spherical. The clippings may be kept to stuff pincushions or hair-pin receivers. (Fig. 2.)

Perfumed Linings for Bureau Drawers

After secretly procuring the exact measure of all mother's bureau drawers, cut two layers of cotton batting to fit each one. These are then generously besprinkled with the finest kind of powdered orris-root (the perfume of the best orris-root most resembling that of violets). These are covered neatly with pale blue silkoline or India silk, in a dainty pattern of trailing flowers. The edges are ornamented with brier stitch, and the whole is tufted at regular intervals with tiny bows of ribbon. For each of these linings procure four little thumb-tacks, such as are used to attach drawing-paper to a drawing-board. These are intended to secure the downy linings to the bottom of the drawers.

Photograph or Music Rack

You can make a rack for photographs or music of a light wire gridiron, bending back the handles in opposite directions in such a manner that they will form a support for the gridiron when it is opened at an angle of forty-five degrees. Ribbons are woven in and out of the wires forming the gridiron, and they are fastened off with the help of a few stitches. (Fig. 3.)

Miniature "Crates" for Bonbons

These little "crates" (Figs. 4 and 5) are made to simulate in every respect the large crates of the wholesale fruit trade. They can be made of a size to hold either a half-pound, a

HANDY-BOOK FOR GIRLS

pound, or two pounds of confectionery. A half-pound crate should have about the capacity of a coffee-cup. This will give an idea as to size. For the round one cut a circle from a thin bit of wood, using dividers and a jack-knife. Then make rough little strips for the sides, fastening them to the



Fig. 4

Fig. 5

bottom with round-headed furniture-tacks. From some old cast-aside basket get a long strip of splint wood, and, splitting it in two parts, make hoops for the centre and top. Draw a bit of silk tightly over the top of the bonbons, and around the edges tie a piece of baby-ribbon, having the silk and ribbon to match in color or to harmonize well. The square crate is made of similar material put together in rectangular form. Both crates should have real little tags, with the name and address of the one for whom they are intended.

A Star-Shaped Paper Box

To make this box, cut two stars from a thin bit of wood, to serve as the foundation for the top and the bottom. An outline of a five-pointed star is obtained in the following manner: With a pair of dividers draw a circle of the required

HINTS TO SANTA CLAUS

size, and lay it off with the dividers into five equal parts. Keep setting the dividers and trying the points upon the circle until the distance from point to point will just go about the circle with five turns. Then from each point draw a straight line to the next point but one. This is plainly shown in Fig. 6 having the five points, A, B, C, D, and E. Take the two wooden stars and cover one side of each neatly with the paper to be used in making the box, pasting it neatly on and trimming the edges. The star to be used for the top will have the paper side up, while the one to be used for the bottom of the box will have the paper side down. Now cut strips of the paper for sides of top and body of the box. These can be any width desired, according to the depth to

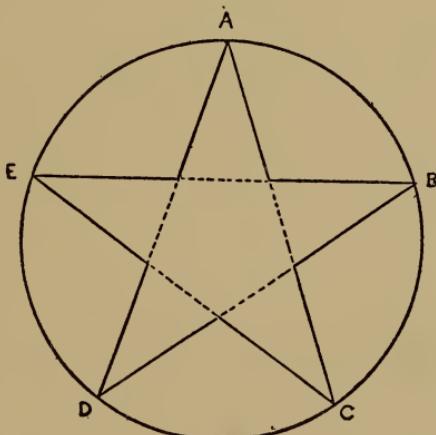


Fig. 6

be given the box. The strips must be long enough to go entirely around the stars, following their indentations. At each point and inner angle crease the strips as they are

HANDY-BOOK FOR GIRLS

fastened to the wooden top and bottom, to give a neat appearance to the sides. Fasten the strips to the wood, either with glue or with small round-headed brass tacks. If the latter are used, a bit of baby-ribbon can be first stretched about the edges and the tacks put in through it. This will give a finish to the edges.

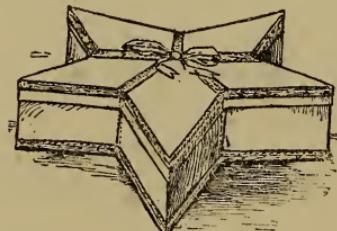


Fig. 7

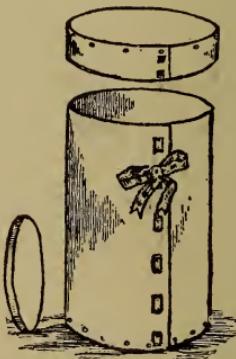


Fig. 8

When the box has been filled it can be tied up with some of the same ribbon, as shown in Fig. 7.

A Circular Paper Box

This box may be broad and low, or small in circumference and high, just as one pleases. Decide upon the size of the box, and then cut two circles from a thin bit of wood of the diameter desired. Cover these on one side with the paper, for top and bottom. Let the top circle be just a grain larger than the other, for the cover must fit over the body of the box. Decide upon the height of both cover and box proper, and cut strips of paper to that width, and of a length

HINTS TO SANTA CLAUS

to correspond with the circumference of the top and bottom, allowing a half-inch extra in length for the joint that must be made, up and down. This joining can most effectively be done by cutting slips along the two edges of the paper, and running a bit of narrow baby-ribbon through them, with a bow near the top, as shown in the cut. The paper is fastened to the top and bottom by small round-headed brass tacks. (Fig. 8.)

A variety of boxes can be made after this plan by simply varying the size and the proportions.

Square Box with Cover Attached

The paper box shown in Fig. 10 is made from a single sheet of paper, and is cut out according to Fig. 9. The paper is cut on the solid lines and folded on the dotted lines. The sides fold together, and the flap on one is pasted inside the

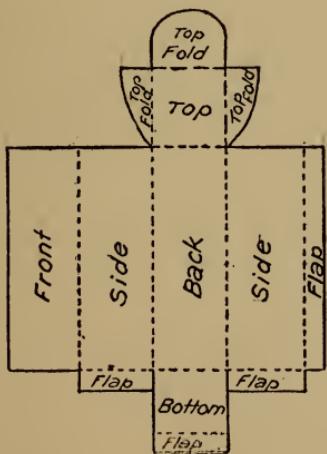


Fig. 9

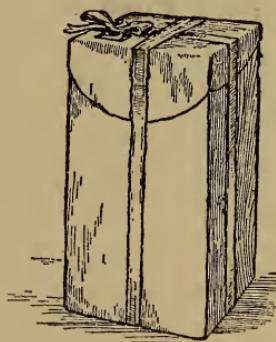


Fig. 10

edge of the front. The flaps at the lower ends of the sides paste inside the bottom when the latter is turned up. The flap on the bottom pastes inside the front piece. When filled, the box is closed with narrow ribbon, as suggested. It can be made any size desired, bearing in mind that front, sides, and back are to have the same width.

Ribbon Favors

Many useful and attractive articles may be fashioned from ribbons. Even fingers unaccustomed to the needle are tempted to turn the pretty strips of silk to account at the season of universal gift-making; while the deft needle-woman makes every scrap tell in the dainty trifles with which she enriches her friends at Christmas-tide.

Three-quarters of a yard of wide ribbon will make one of those bags that every girl or woman likes to keep near at hand. Indeed, one might write a chapter on bags alone, to so many uses have they been put. In one of these flowered ribbon puffs there may be a bit of embroidery, some fine lingerie, or lace-work—portions of that “pick-up work” which most women keep at hand to sew on at odd moments; or it may be that the humble dust-cloth hides within the folds, ready to wipe away some spot that has been left by a careless or hurried housemaid. If one is making up for lost moments, Christmas having crept upon one almost un-awares, these small bags may prove a grateful suggestion; they are so easily made, three or four being possible in an afternoon’s work.

A Holder for Ribbons

A little puff that might be classed under the name of "bag" holds the baby-ribbon now almost universally used in the lace and edging of undergarments. (Fig. 11.) This takes a pasteboard disk two inches in diameter, a brass upholstery ring one inch in diameter, three-quarters of a yard of ribbon five inches wide, and about a yard and a quarter of ribbon half an inch wide. The disk is covered with the wide ribbon; three inches serves for covering, and the remainder, two-thirds of a yard, is fastened together on the ends, and gathered on one selvage edge to the disk; the other edge must be gathered to the brass ring, which has been carefully buttonholed over with embroidery silk the shade of the ribbon. With the addition of two buttonholed loops that are sewed in the bottom of the disk for holding the flat bone bodkin the work on the pretty trifle is finished. There yet remains, however, the filling of the puff with baby-ribbon. This must be run off of the spool and put in an untangled mass that will easily pull loose inside the bag, before the little gift is ready for its place among the dainty Christmas packages. This bag possesses an added virtue, too. It may be sent by mail in a good-sized square envelope, obviating the expense and bother of an express package.

Needle-Books and Utility Bags

There are numbers of ways to utilize ribbon, in making needle-books, and thread-and-needle receptacles for the travelling bag, or for hanging near the dressing-table, pro-

HANDY-BOOK FOR GIRLS

viding just at hand the utensils for taking that stitch in time which so surely saves nine. For one of these use a half-yard of Dresden ribbon and a half-yard of plain ribbon about three inches and a half wide. (Fig. 12.) Stitch them care-

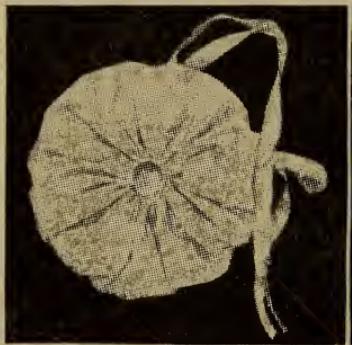


Fig. 11

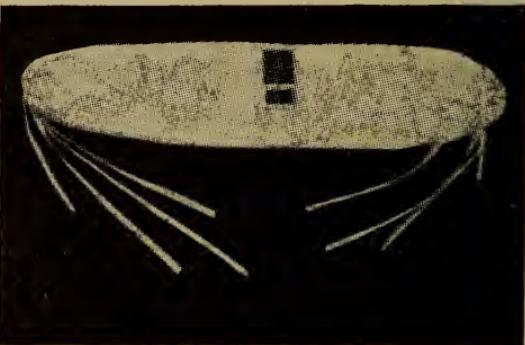


Fig. 12

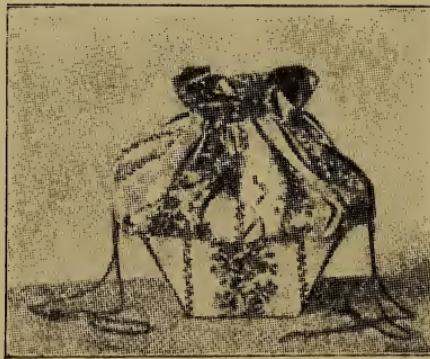


Fig. 13

fully together, the plain ribbon serving as a lining to the figured. About two inches down from the ends run a line of feather-stitching across to form a small pocket for holding buttons; hem the ends and run baby-ribbon through for

drawing up closely. Nick a bit of fine white flannel for holding needles of three or four sizes and fasten it just in the middle of the strips. On this flannel put two spools of thread or silk, black and white, and one of twist; run baby-ribbon through them and fasten it tightly with tiny bows to the edge of the ribbon band, and shoe or glove buttons or an unsightly rent may be taken care of in travelling, for the handy little bag may be rolled up and tucked into a small corner of the travelling-bag.

There are always the more elaborate sewing-bags with the stiff bottom and the gathered top drawn together with cords or ribbons. They are fitted up with pincushions, needle-books, and scissors, and serve to keep delicate work clean and fresh. While very useful and decorative, they take patience and accuracy in the making, and any woman who sews feels deeply appreciative of such a gift. Out of a quarter of a yard of figured ribbon, perhaps a "left-over," one may fashion one of those pretty old-fashioned "tomato" pincushions for hat-pins, or to tuck into the travelling-bag to use in one's room at hotels for pins. And ribbon-covered squares of pasteboard fastened by a band of ribbon elastic serve to hold fresh handkerchiefs in compact and convenient form while travelling.

Ribbon-Covered Boxes

Next to the bags are the boxes covered with ribbon, and one need not be a needlewoman to be able to make exceedingly pretty gifts out of the combination of box and ribbon. (Fig. 13.) The work demands, however, deft fingers, care

HANDY-BOOK FOR GIRLS

in measurement, and exquisite accuracy in securing a fit for covering and lining. When the bottom of the box, inside and out, and the top of the lid inside are duplicated with pasteboard thin and firm and a trifle smaller, and covered with the lining fabric, then the work becomes easy, for all of the covering and linings are pasted down firmly under these duplicates, which go on as a final finish to cover unsightly edges. The outside cover of the box must have a thin padding of cotton wadding, and one side of the lid must be broken off. The inner lining of the box is then pasted up tightly to the inner top of the lid, and the outer covering of the lid is pasted down firmly to the bottom of the outside of the box, providing the hinge. Narrow ribbons are sometimes used as ties, or a little bow is placed in front as a lift for the lid, but this seems superfluous. Many women keep shirt-waists and delicate bodices in the covered boxes, which generally carry a delicate scent under the lining; indeed, so universal is the use of the boxes for waists and fragile bodices that light standing-racks are made to hold either four or six of them. The racks may be made by any carpenter, and painted the prevailing color of the room where they stand. Similar racks are also made for the covered bonnet-boxes which drop at the side for the removal of the bonnet instead of by lifting off the lid.

Chapter XXVII

EASTER FAVORS

THE charming old custom of giving presents on Easter morning is coming into more general use every year. Many dainty gifts can be made by the clever little fingers at home. Flowers and butterflies, emblems of the resurrection, are the favorite decorations for sachets and other favors. The flowers used should be white—the color of innocence and purity. Lilies are the first choice, then white pansies, roses, daffodils, daisies, azaleas, carnations, jonquils, and violets. Palm branches (typifying victory) may be painted with a Latin cross of gold.

The lithographed cards so much liked a few years ago have had their day, but many painted ones are still sent to distant friends. A little girl can fashion a lovely souvenir by pressing four or five pansies under a heavy weight for a week, and pasting them, when dry, on a gilt-edged card. They will retain their colors, and look like a painted bouquet.

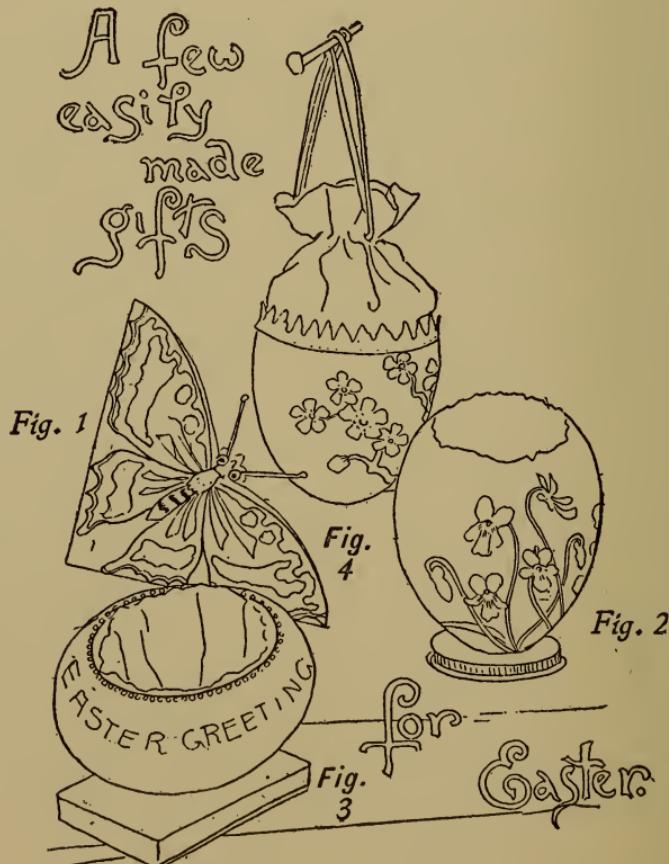
A book-mark (Fig. 1) is easily made by cutting off the corner of a linen-lined envelope. On this paint a butterfly gorgeous in scarlet, black, and gold. Make the antennæ of wire. When in use it is slipped over the corner of the page.

HANDY-BOOK FOR GIRLS

Fancy Easter Eggs

Of Easter eggs there is an endless variety. Here are a few new ones:

Take a duck egg, empty the contents through a hole in the large end; trim the edges of the opening evenly with scissors; put a spoonful of water in a cup; sift plaster of Paris into it until it begins to stiffen. Fill the lid of a



EASTER FAVORS

pill-box with it, and gently press the small end of the egg on it—just enough to keep the shell upright. Leave till the next day to harden; then if the shell is loose, glue it fast. Choose a shallow pill-box about two inches wide. Gild the base or cover with moss. On Easter morning place at the plate of each member of the family one of these “flower-holders,” with two or three pansies or rosebuds. (Fig. 2.)

A large egg which has both ends of the same size will make a novel jewel-casket (Fig. 3). Cut a large opening in the side. Mount with the plaster on an oval or diamond-shaped box. Take a narrow strip of stiff paper, make a ring of it exactly fitting the inside of the egg. Glue to this a bag of silk deep enough to reach the bottom of the egg; before fastening this in place put in a piece of cotton sprinkled with orris-root. If the edge of the shell is uneven, glue a bit of chenille over it. Five cents’ worth of plaster (the kind used by masons for white walls) will be enough. Use stratena or hot white glue.

An Eggful of Candies

A bonbon bag (Fig. 4) is always a delight to children when filled with minute candies. Break a hole the size of a quarter in the large end of an egg. Glue a bag two inches deep on the outside, covering the raw edge with a row of gilt paper stars (to be found in any toy-shop). Run two pieces of knitting silk in for drawing-strings. Decorate with hawthorn if the egg is dark. Put violets or peach blossoms on a white egg.

A sachet of pale blue or pink silk may be decorated with

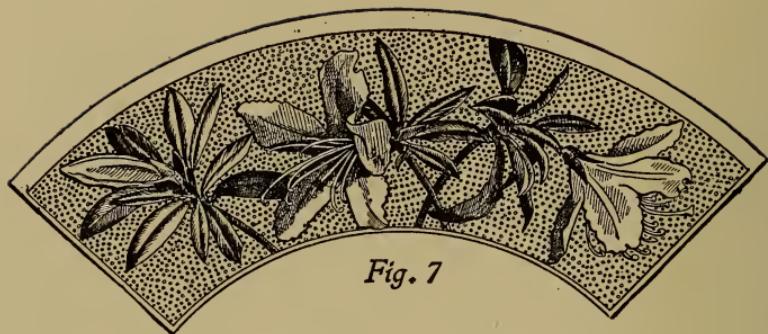


Fig. 7



Fig. 5

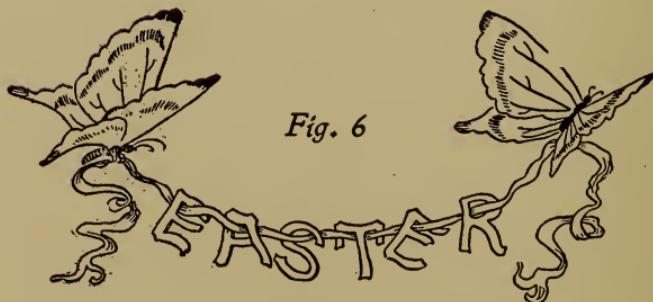


Fig. 6

DESIGNS FOR EASTER SOUVENIRS

EASTER FAVORS

an embroidered spray of white Chinese primroses (Fig. 5). Make a fancy bow of soft ribbon, baste in place, and sew the edges down neatly.

The butterflies (Fig. 6) can also be painted or worked in outline on a sachet. The design of white azaleas (Fig. 7) is suitable for painting on a three-cornered sachet shaped like a fan. The sticks of the fan must be indicated with gold paint, or it would be effective in white and gold on a satin fan. Fans are sold at a reasonable rate in the large dry-goods stores all ready for painting.

Part V
OUT-OF-DOORS

Chapter XXVIII

HOME-MADE HAMMOCKS

WHEREVER the summer sojourn may be, a hammock or two of one's own, to be slung in some shady nook, more or less secluded from the hotel or farmhouse or camp, adds greatly to its pleasure; but a difficulty in the way of including this comfort in the impedimenta of the summer exodus is the bulkiness of the bought hammock—and often the exceeding ugliness of any but the more expensive kinds. However, a little time, about sixty cents for material, and not more skill and patience than the average girl of twelve possesses, will serve to construct a hammock far more comfortable, durable, and "sightly" than any to be bought for five times the money, and which, moreover, may be left out in the rain without misgiving, or sent to the tub, if soiled, as safely as a towel. Its best advantage, though, for the summer wayfarer, lies in the fact that it may be folded perfectly flat, and three or four might be laid at the bottom of one's trunk, taking up no appreciable space.

First decide how long you wish your hammock to be: the baby may have his own tiny one, three and a half or four feet in length, if you like, and two and a half yards of material will furnish one of ample size for a tall man. Let

us suppose this to be the length decided upon; and having bought two and a half yards of eight-ounce cotton duck, a spool or ball of linen thread, a bit of beeswax, and two ordinary harness rings, we proceed to make our hammock as follows:

How to Make It

Turn down a four-inch hem at each end of the length of material, wax your thread, and back-stitch—"big stitches" will do—this firmly down, after having turned in a liberal half-inch to afford a good "hold." An inch and a quarter nearer the end run a second line of back-stitching—stout machine-stitching with heavy thread will do; but hand-stitching with waxed thread is much stronger, and the waxing protects the thread from rain. Your hammock now looks like a curtain with a hem and rod-casing at each end. Smooth out each end in turn on the table, and in the inch-and-a-quarter space draw five circles—a cent or a thimble gives the right size to run your pencil around—one at each side, one exactly in the middle, and one exactly in the middle of each space between. The circles at the sides should be not less than an inch and a quarter from the selvage, to allow for differences in the length of barrel-staves, which are to be the "spreaders"—but we haven't come to those yet.

Again take your waxed thread and stitch once, or run twice, around each pencilled circle, through the two thicknesses of duck, which are then cut away, not too close to the stitching, leaving a large eyelet ready to be worked. Lay a loop of waxed heavy twine around the eyelet, and

HOME-MADE HAMMOCKS

over this work as closely and firmly as you can, with waxed thread—exactly as you would make an eyelet in embroidery, only on a gigantic scale.

Your hammock is now ready to be folded flat and laid in your trunk, unless you wish to add a valance, which is easily done by stitching (on the machine) a foot-wide strip of the same material or of colored denim, or by knotting a fringe of colored cord (at five cents a ball) along each selvage—but these attempts at ornamentation only increase the bulk as well as the cost. When you have reached your destination, any village or “cross-roads store” can supply two narrow barrel-staves—which, shaved down a little for smoothness’ sake, are run into the broad hems at the ends—and a sixty-foot length of braided cotton clothes-line (cost, fifteen cents). This is cut in half, and each half into five six-foot lengths, to be waxed, doubled, and each put through an eyelet in a firm slip-knot, enclosing the “spreader.” The ends of all five double lines are then gathered together and put smoothly through a harness ring, below which they are wound firmly with waxed twine. Repeat this process at the other end, and the hammock is ready to be slung.

Chapter XXIX

AT THE SEA-SHORE

WHEN visiting the sea-shore for the purpose of gathering sea-weeds, or to learn something of their modest and simple lives, it will be noticed that twice in every twenty-four hours the water advances and recedes, affording an opportunity for the collector to follow the beach down to the lowest tide-mark, and thus make sure of some small portion of the beautiful marine vegetation of the wondrous ocean.

The Sea-Weed Zones

The first band or zone of sea-weeds encountered is that of the coarse olive-green sea-weeds commonly called bladder-weed or rock-weed. This alga is easily distinguished by the double series of round air-vessels with which the fronds are studded, and the coarse midrib running up the centre of each frond. On all rocky coasts several varieties of this family of sea-weeds are to be met with. When trodden on, the air-vessels explode with a sharp report; from this fact it has been christened the snap-weed by young people living on the coast, to whom it affords much amusement. On this coarse weed, and under its dark and damp masses, in

AT THE SEA-SHORE

the tide pools and on the rocks on which it grows, are to be found many varieties of our most delicate and beautiful sea-weeds.

After the olive-green zone has been passed, the bright greens, brilliant reds, and purples are reached.

Sea-weeds are rootless plants, and do not derive their support from the earth, as do other plants, but obtain their entire subsistence from the water. The small flat disk to be found on the end of the main branch is only for the purpose of adhering to the rocks, stones, or other objects on which they may be found attached.

We have illustrated (Figs. 1-5) some of the most beautiful

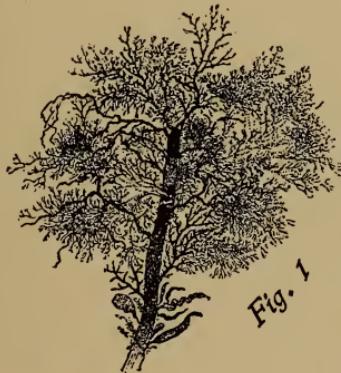


Fig. 1



Fig. 3



Fig. 2

types of sea-weeds common on our coast, but they are so learnedly and scientifically named (being without common names), as, for instance, *Polysephonia urceolata*, that we have depended on the simple figures to enlist the reader's interest, and have avoided the discouraging scientific names.

Mounting Sea-Weed

After the specimens have been thoroughly washed, the finest should be separated from the coarser ones, and placed in wide and shallow dishes filled with clean, fresh water. Sheets of drawing-paper are slipped under the specimens, which are arranged in a natural and graceful position as they float over the immersed paper. A camel's-hair brush and a coarse needle, with the assistance of the fingers, are all that are required for the arranging of the sea-weeds on the paper. When the specimen is in proper position, it is slowly and carefully lifted from the water on the drawing-paper, so as to retain the desired position of the sea-weed.

The mounted specimen should be pinned up for a few minutes to allow the water to drip off before placing it in the press. There is no need of fastening the plants to the paper, as most of the sea-weeds are supplied with a glue-like material which fastens them firmly to the paper when in the press drying.

A Sea-Weed Press

The most simple and cheap sea-weed press that we know of consists of two large boards (as shown in Fig. 6, at AA), and on the lower board (A) are placed layers of blotting-

AT THE SEA-SHORE

paper with layers of clean-washed pieces of old sheeting. The sheeting and blotting-paper layers are for the purpose of quickly absorbing all moisture from the sea-weeds. As soon as the water has dripped off the mounted specimen, it is carefully laid on two or three thicknesses of blotting-

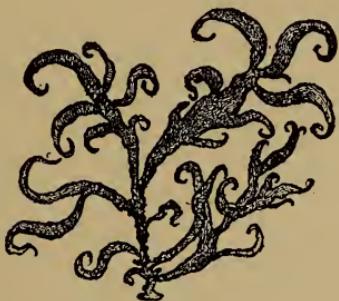


Fig. 4

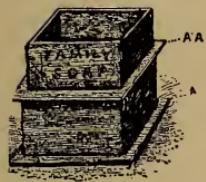


Fig. 6

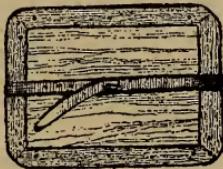


Fig. 7

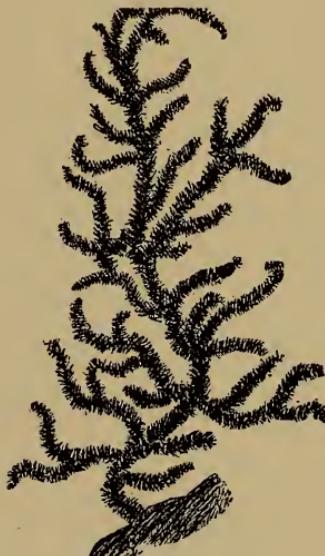


Fig. 5

paper; on the face of the sea-weed a piece of the muslin or sheeting is laid; over the sheeting more blotters are placed, and on this second layer of blotters another set of sea-weeds. In this way all the specimens are disposed of, and the top board (AA) is placed; on this a soap-box is placed, which is filled with either sand or stones, by means of which the desired pressure is obtained.

A Field Press

For a field press, the most simple form that we know of is shown in Fig. 7, which is made out of two pieces of three-quarter-inch stuff, well strengthened with a frame of black walnut, fastened with three screws in each corner. After the sea-weeds are placed in position on one of the boards the top board is laid on, and the specimens are brought under pressure by means of a stout strap. During the stormy days of winter, when you are confined to the house, you will find real pleasure in arranging your pretty specimens in an album.

Shell Set for Writing-Table

The large shell of the periwinkle (Fig. 8) may be mounted on a flat base made by putting wet plaster into a small oval box cover. The plaster will probably shrink away from the shell in drying, so you must not forget to glue it fast before gilding the base. Fasten a small, moist sponge inside, on which to wipe pens. The top of the shell will do for a pen-rest.

A blotter may be made to match of cardboard, shaped and painted to look like a large oyster-shell.

An inkstand may be contrived from an odd group of young oyster-shells, with a tiny bottle fixed in the middle with plaster so that only its neck is visible.



Fig. 8

AT THE SEA-SHORE

The seal may be fastened on a quaint handle formed of the hard, dry little body of the sea-horse, which is occasionally found on the beach.

Add to these the penholder made from the tail of the horseshoe-crab, and you will have a very briny set for your writing-table.

Shell Decoration

One summer, not long ago, the young children of a family living near a large city collected shells enough to inlay the facing around the fireplace of their summer home. They were set in place by an older sister, who arranged the largest shells symmetrically in stars and circles, filling the spaces between with rows of the smaller ones. Only a small portion of the mantelpiece was finished at one time, as the plaster hardened so quickly. The family are very proud of their very successful bit of decoration, and intend to supplement it this year by a shell screen to shut off an end of the long hall.

Chapter XXX

SALT AND FRESH WATER AQUARIUMS

HUNDREDS of young people spend their vacation on or near the sea-shore, and have a good opportunity to study the wonderful habits of animal and vegetable marine life. Therefore we have undertaken to throw out a few plain hints as to the management of a salt-water aquarium, in which these interesting forms of nature can be observed to greater advantage.

We will start off with one of the small tin-frame tanks sold at a low price, or a candy jar, or a small-sized wash-tub—any vessel that will hold water, and is not of iron, tin, or copper, any one of which will poison the water.

After washing out the tank carefully, and filling it with clear sea-water, we will place in it twelve silver-shrimps (bait shrimps). At the end of two days they are dead, and you ask why did they die when they had so much water to live in. They died of suffocation, after they had breathed all the air contained in the water. We will take out the dead shrimps, and in the same water place a good handful of *ulva* (sea-lettuce, sea-salad), one of the most common of all marine plants, and place the aquarium in a strong and direct sunlight, by this means exciting the *ulva* to work, or,

SALT AND FRESH WATER AQUARIUMS

as it is termed, aerify the water. In less than an hour's time a froth will be seen forming on the surface of the water, adhering to the sides of the aquarium. Now observe the *ulva* closely, and from its edges and surface very fine threads of silver bubbles are pouring out and ascending to the surface. In an hour's time the water will be thoroughly charged with air. We will again place twelve more shrimps in the aquarium. This time they will live, and we will have established a *true* aquarium—an aquarium based on the self-sustaining principles of nature, wherein *it will not be necessary to change the water.*

Fish as well as human beings breathe air. Air is contained in all water. After the shrimps had breathed or used the air contained in the water several times over, it became unfit to sustain animal life any longer, and so they smothered: just the same as if a number of people were placed in a room, and all the doors and windows and ventilators were sealed up tight, so that no new air could enter. They, too, would suffocate in a short time and die. All plants living in water are constantly manufacturing new and pure air for their friends and companions the fishes, particularly when under the action of sunlight.

The great secret in establishing a self-supporting aquarium is to establish a natural balance of water, fish, plants, and light, so that none of these agents is wanting in quantity. For instance, a strong light is required to cause a healthy development of the plant life, but not direct sunlight, or the plants will be forced too rapidly, and death will soon follow. Again, direct sunlight will increase the temperature of the water to such an extent that many of

the fish will die. If the animal life is in excess of the plant life and the water contained in the aquarium, the animals will perish for want of sufficient air. Again, if the aquarium is overstocked with plants, so that they are crowded so closely that the light fails to reach some of them, decomposition will take place, and everything will become a decaying mass. In fact, it is only by beginning on a very modest scale, with a very few and small fish at first, and by gradually increasing the number, that a beginner can expect to succeed. Overstocking with animal life and over-feeding are the two greatest temptations that beset the path to success for the aquariumist; but patience, perseverance, and critical observation will eventually lead to success.

The greatest care must be taken, and all shells, rock-work, sand, and plants must be washed over several times, so that no injurious substances may be introduced.

Ulva, or sea-lettuce (Fig. 1), is to be found in abundance in all our small bays and inlets at low tide. For the aquarium, those specimens which are thick in texture, and of a dark-green color, only are fit for manufacturing air. Never be tempted to make use of the light-green and thin specimens, as they are not sufficiently matured, and will soon decay if placed in the tank.

Scallops, Shrimps, and Snails

Scallops (Fig. 2) when young have a curious way of changing their location by means of opening their shells and then closing them with great force, which sends them off at an angle, and so they go dancing along the bottom

SALT AND FRESH WATER AQUARIUMS

till they reach a spot that suits them. This shell-fish forms a beautiful addition to an aquarium.

The silver-shrimp (Fig. 3), with figured back (all other varieties must be avoided), I have always considered as

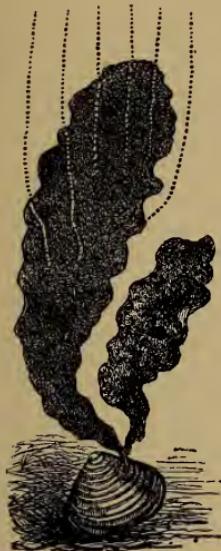


Fig. 1

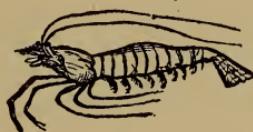


Fig. 3

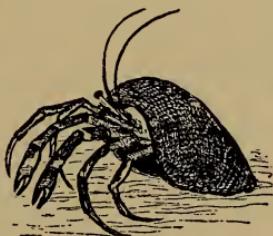


Fig. 4

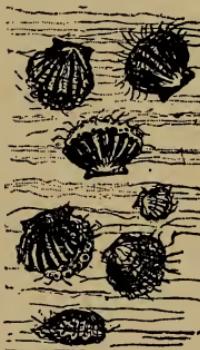


Fig. 2



Fig. 5

constituting a Board of Health in an aquarium; for no sooner does the water become unhealthy than these transparent and grasshopper-like creatures will make desperate attempts to jump out of the tank. These shrimps, and the little hermit-crab, and the buccinum (a small black sea-snail) are Nature's house-cleaners. They are always on the look-out for decaying animal or vegetable matter, which, if not in too large quantities, they speedily devour.

I have seen these black snails gather on a dead fish from a distance of half a mile; in less than a day's time nothing was left of the fish but his bones and scales, and these were picked so clean that they had a polished look. These snails are provided with ribbon-like tongues, from which project a great number of minute and beautifully constructed teeth. By passing these tongues backward and forward they cut their food down much as a mowing-machine cuts grass. These snails are the scavengers of all dead fish and vegetable substances found in our bays and rivers, and to them we owe a great deal of the purity of our waters.

Hermit-Crabs and Pipe-Fish

The little hermit-crab (Fig. 4) lives alone in an empty shell, which he carries about with him wherever he goes. His reason for living in a shell is because the hind part of his body is soft, and not protected with a hard shell, like the fore part of his body. The end of the soft body of the hermit-crab is provided with hooks, or claspers, with which he holds on to the inner chamber of his shell so tightly that it is almost impossible to get him out except by breaking the shell. Very often these crabs are to be found with a colony of living polyps growing on their shells. These polyps are very interesting, from the fact of their being the parents of one of our most beautiful jelly-fishes.

When a hermit-crab grows too large, or so fat that his shell pinches him, he hunts up a new one. First he pushes his long claws far into it, just to see that no one is inside and that it is nice and clean; then he rolls it over and over,

SALT AND FRESH WATER AQUARIUMS

often lifting it so as to judge of its weight. If it suits, he drags it close to the entrance of his old home, and in an instant he has whisked into his new house. Hermit-crabs are great house-hunters, often moving just for the fun of it. They are always skylarking with one another like monkeys, and, in truth, they are the monkeys of an aquarium. When the water in an aquarium becomes bad, they are sure to indicate it by leaving their shells and trying to crawl out of the tank. In all respects they are the most valuable and interesting inhabitants of the aquarium.

Pipe-fish (Fig. 5) are apt to be delicate; still, if your aquarium is in perfect health, and the water is teeming with minute animal life, they will get along nicely. Their favorite food consists of the eggs of all small crustaceans, such as shrimps, sand-hoppers, and lady-crabs. Mrs. Pipe-fish does not take care of the children, but Mr. Pipe-fish places them in a long folding pocket that runs along the under side of his body (which I have tried to show in the engraving). When he lets them out of this pocket into the vast ocean world to shift for themselves, they are only a quarter of an inch long, no thicker than a bristle, and almost transparent.

A Fresh-Water Aquarium

Many fresh-water plants have a tendency to grow above the surface. When this takes place, the leaves become so different in shape that they can hardly be recognized as belonging to the same plant. Therefore care must be taken to keep all plants submerged that are intended to supply air for the fish.

HANDY-BOOK FOR GIRLS

One of the most common plants is the mermaid-weed (*Proserpinaca*). We have drawn it submerged and out of water, to show the change in the leaf. It grows along the margins of ponds that partially dry up in summer (Fig. 6).

Water-thyme (*Anacharis canadensis*) grows in slow-flowing streams. It requires coaxing to establish it in an aquarium, but when once rooted, is apt to grow too fast, requiring thinning out. Heap plenty of gravel on the root ends. Do not tie the bunch with string, as it will cause it to decay (Fig. 7).

Nitella flexis is almost a rootless plant, and will grow without any care. It is found growing in shady parts of cool ponds, streams, and lakes (Fig. 8).

Fontinalis antipyretica grows in springs and cool, shady ponds. It resembles a very fine and long moss. In color it is of a beautiful light green. We have often stored up quantities of this plant during summer (it becoming perfectly dry), that we might have it for winter use, and when placed in an aquarium it started out as fresh as ever (Fig. 9).

Duck-weed, or duck's-meat (Fig. 10), is a small floating plant, covering the surfaces of ponds and lakes in shady places. It is one of the best surface plants for producing shade, or for cutting off light that enters from the top of the water. Its thousands of rootlets afford hiding-places for numerous small aquatic animals, such as the hydra, crimson water-spider, and the brick-maker.

A small stone should be tied to each bunch of plants, to anchor them until they take root.

After your aquarium has been in operation a few days, a green coating will begin to form on the glass. This is a

SALT AND FRESH WATER AQUARIUMS

minute plant that is developed by the action of light. Allow it to grow, as it is the favorite food of goldfish and snails.

We have given drawings (Fig. 11) of the two best kinds of snails. One is shown with its broad foot expanded, by



Fig. 6

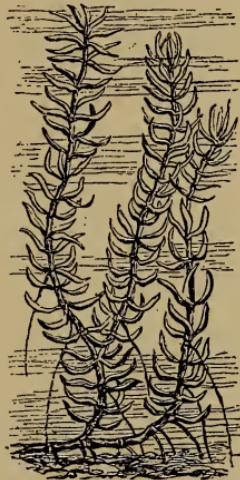


Fig. 7



Fig. 8

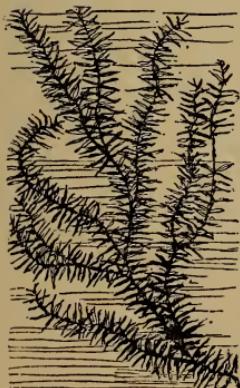


Fig. 9

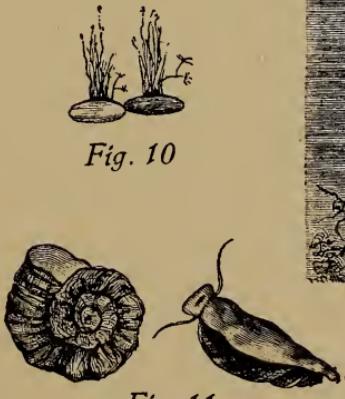


Fig. 11



Fig. 12

which it moves along the surface of the water, or on the glass when eating the green coating spoken of.

For keeping the water very clear, introduce a small-sized fresh-water mussel. Give him at least two inches of sand, in depth, in a corner of the tank, to burrow in, but watch him well, for if he dies without your knowledge your aquarium will be ruined.

Caddis-Worms

In Fig. 12 are illustrated three kinds of caddis-worms. These worms are useful for consuming decaying animal matter. When a "cad" has grown too large for his house, he makes a little case of silk, which he covers at each end with pieces of leaves, wood, or straw, biting them to the right length; some fasten on small bits of stone and shells. However rough the outsides of their houses may be, the insides are smooth, and lined with silk. When he changes into a chrysalis, he crawls up a plant, and closes up both ends of his house with a strong network of silk, which allows the water to pass through, but prevents the entrance of enemies. As he has taken care to place himself near the surface of the water, he easily escapes when he comes forth a four-winged insect resembling a small moth.

Sticklebacks and Dragon-Flies

The nine and the three spined sticklebacks (Fig. 13) are, without doubt, the most wonderful fish for their size that are common to our waters. They will live well in either

fresh or salt water aquaria, building nests and raising their young under all discouragements. The male builds the nest for the female to lay her eggs in. The nest is composed of plants cemented together with a glue provided by the male, who also carries sand and small stones to the nest in his mouth, with which he anchors it. During the breeding season the male assumes the most brilliant hues of blue, orange, and green; previous to this season he is of a dull silvery color. When an enemy approaches the nest, be he large or small, he will attack him, inflicting wounds with his sharp spines. Nor will he allow the mother of the young sticklebacks to come near, as she is so fond of her babies that she often forgets herself and eats them up. When the young "tittlebacks," as they are often called, swim too far from the nest, the male takes them in his mouth and brings them back, throwing them out with such force that they make many somersaults before landing. Sticklebacks are the smallest known fish when first hatched out of the egg, being nearly invisible.

Here is the dragon-fly (Fig. 14), as he looks before he gets his wings. He lives on the bottoms of ponds when he is young; but at a certain age he ascends to the surface, and crawling out of his old clothes, comes forth an unmistakable darning-needle. When he lived under the water he had very large and long jaws, folded up on the under side of his head. If a fish came within reach, he would dart out this curious trunk, and seizing it, convey it to his mouth. He also has the power of taking in and squirting out water from his tail; this action forms a current, which draws small insects within his reach. The

HANDY-BOOK FOR GIRLS

taking in of the water is also his method of breathing, and the ejecting of it with force propels him through the water.

Water-boatmen, or boat-flies (Fig. 15), are so named from their resemblance to tiny boats with oars. As they

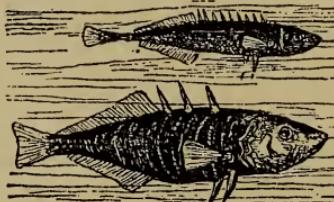


Fig. 13

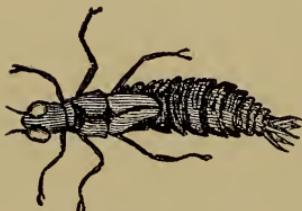


Fig. 14

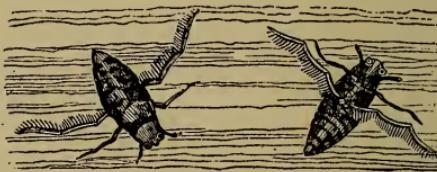


Fig. 15



Fig. 16



Fig. 17

have to swim on their backs, they are provided with large and very observing eyes. When they breathe they come to the surface.

It is best to keep these aquatic insects by themselves, as they are all voracious feeders, and fierce in their habits. They are not so beautiful in form, color, and motions as

SALT AND FRESH WATER AQUARIUMS

fish, but possess a much greater interest as they pass through their many transformations. As most of them can fly, the aquarium should be provided with a close-fitting frame covered with mosquito-netting.

The crimson-spotted newt (Fig. 16) is one of the most inoffensive of all animals for the aquarium, and is valuable from the fact that he does not breathe water, but rises to the surface to breathe. Every few weeks he casts his skin, which he swallows, seeming to relish it, after which he comes forth more brilliant than ever.

Tadpoles and Rock-Fish

An aquarium without tadpoles (Fig. 17), from which to obtain a supply of small frogs, is not much of an aquarium; and as they are surface breathers, you can use them freely.

The rock-fish is a very safe fish for the aquarium, as it does not breathe the water, but rises to the surface and stores away a supply of air, with which it descends to the bottom, remaining for half an hour before it rises for a new supply.

All fresh-water fish (excepting the trout family) can be kept in a fresh-water aquarium. Select the very smallest specimens; have all of an equal size, to prevent their quarrelling; feed on shreds of raw beef, or earth-worms that have been freed of all earthy matter by placing them in damp moss or grass over night. *Look out for food not eaten.*

Chapter XXXI

BUTTERFLY COLLECTING

THE girl who wishes to form a valuable and pretty collection of butterflies must set about it in the right way. The first thing is to prepare a net. The brass rings with handles sold by all dealers in sportsmen's goods for landing-nets for fish will answer the purpose, but any ingenious girl can make her own frame. Get a smooth, light hoop about fifteen inches in diameter. If you cannot find one small enough, make it from a barrel hoop. Bind the hoop firmly to a rod about three feet long. Now cut out a round piece of mosquito-netting about three-quarters of a yard in diameter, and fasten it to the hoop. Now the net is ready (Fig. 1).

The permanent case for your specimens must be a neat shallow box of some pretty wood, with a glass cover. Thin pieces of cork should be glued on the bottom at intervals, according to the size of your butterflies; upon these the insects are mounted by a slender pin which runs through the body. When the case is full, it should be sealed air-tight; for if there is the finest crack, moths will get in and ruin your collection.

You cannot take your case to the fields, so you must

BUTTERFLY COLLECTING

have some small paper boxes in which you can mount your specimens until the wings are dry and they are ready to place in the case.

The best thing for a youthful naturalist to use to kill the butterfly is ether. As it evaporates very quickly, it does not injure the color or texture of the beautiful insects, and it ends the life of the butterfly instantly and without giving pain. There are other things often used by natural-



Fig. 1

ists, such as cyanide of potassium, but they are dangerous chemicals for young folks to handle, and we recommend ether as being safe, and sure to kill the butterfly.

Now swing your net over your shoulder, take the ether, which should be in a bottle with a glass stopper to prevent evaporation, the box for mounting specimens, and some fine pins, and let us start out in search of butterflies. We will go first for some of the large ones that fly about the fields and by the roadside.

A quick throw of the net, and—off goes the butterfly, sailing away across the sunny field. Hurry over the wall and give chase after it. The girl who would entrap a butterfly must follow where it leads, and stop neither for walls, ditches, nor swamps, or the prize will be lost. Now the net descends skilfully, and the great insect is fluttering in its meshes. Gather the net carefully in your

hand so that the creature will have no room to flutter and break its wings. Now pour a very little ether on its head—two drops are enough—and it lies motionless.

Take the dead insect in your hand, touching the wings as little as possible, as the delicate down is easily injured, and passing a pin through its body, fasten it in the bottom of your box. Open the wings carefully, and arrange them at once while they are soft and flexible. A pin fastened between the wings, not through them, will hold them in place until they are dry.

The Mounting of Butterflies

To mount butterflies prepare a setting-board as shown in Fig. 2. Put the body into the groove, as here shown, and

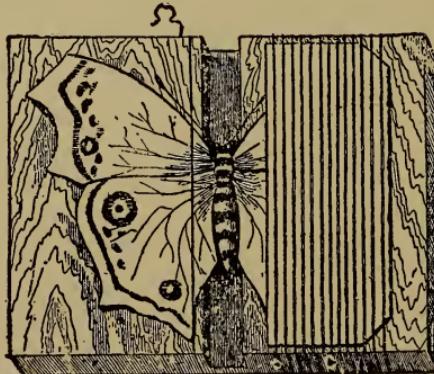


Fig. 2

then, using a fine needle, spread the wings well, the front wings being quite well forward, and the hind wings well away from the body. Get the antennæ in position, and put two pins crossed under the abdomen so it does not fall.

BUTTERFLY COLLECTING

Put over the wings pieces of stiff cardboard, as in the cut, and bind them down with the string. Let them be on the setting-boards one week after you think them thoroughly dry. If insects become too dry to spread they can be softened by putting them, for a few hours, into a closed jar in which there is wet sand.

There are various ways of arranging a permanent butterfly collection, but the best way is to provide a light box two inches deep and twenty by twenty-four inches square. Have the bottom of cork, and over the top put a cover with glass in it. Cover the cork bottom with white paper. Insects should be arranged as they are classified in science, each with a label below the insect giving scientific name, date and place of capture, and with both sexes present. With each ought to be placed the other stages of its life, if possible: egg, caterpillar, pupa, and cocoon, if it makes one. Some prefer to set insects on pins arranged to show their color to the best advantage, but this is not so good a plan from a scientific point of view.

Part VI

AMUSEMENTS AND MISCELLANY

Chapter XXXII

PRIVATE THEATRICALS

PRIVATE theatricals are always good fun, and many amateurs will doubtless be interested in the following description of how a stage and its accessories may be put up in a house without injuring walls or ceilings; then how it may be taken down again and stowed away for future use.

In most private houses, the parlor, in point of size and convenience, especially if the outside public is to be invited, makes the best room for conversion into a theatre; a large garret, if there is sufficient head room, may also be used. Precaution should be taken in selecting a place for a stage to see that behind it there is some method of access from other parts of the house, that the ordinary living-rooms may be made available for dressing-rooms, property-rooms, make-up rooms, etc.

A Home-Made Stage

A raised stage is very desirable, even though it entails additional cost. It will not only add materially to the comfort of the spectators, but will conduce very much to

the players' effects. A simple way to erect a solid platform, that will do away with horses and expensive cross-supports, which would need the aid of a practical carpenter, is to utilize starch, soap, or canned-goods boxes of a similar size. Taking it for granted that the width of the average room at the disposal of the actors is eighteen feet, get, say, fifteen soap-boxes, and place five of them end to end in three rows, as shown at Fig. 1. Along the side of each sec-

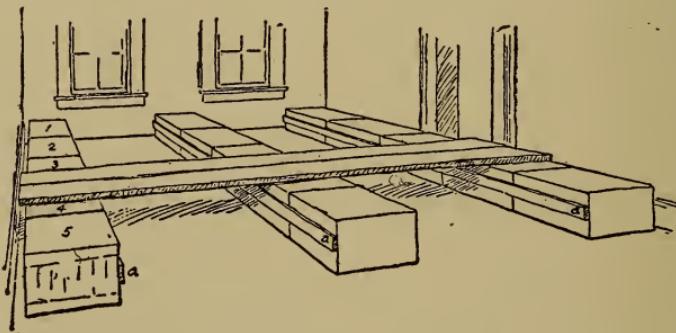


Fig. 1

tion of boxes nail a strip of wood to keep the three separate rows in line. Place the two outside rows about three inches from the baseboard on either side of the room. Then take spruce boards sixteen feet long and lay them at right angles over the box supports, and fix them to the same. Screws are to be preferred, as the stage can then easily be taken up and put down again. Following out these instructions, a stage free from spring should be the result.

If possible, the boards should be covered with a green or brown cloth, the thicker the better, in order to deaden the sound of feet on the wood. These colors are preferable, because they represent either the earth or the greensward.

PRIVATE THEATRICALS

For an interior they make a good groundwork, on which may be placed rugs of varying size.

The Proscenium Frame

The most important and at the same time most difficult parts of a theatre for an amateur to build are the framework of the proscenium and the outline of the stage by which the scenery is supported. The proscenium is the covered front of the stage which, with the curtain, shuts off the mysteries behind from the spectators in front.

Against the boxes at either side of the room, about a foot or eighteen inches from the edge of the same, nail or screw uprights two inches wide by an inch thick. These uprights should reach to within an inch of the ceiling. Take, then, a piece of wood, just short of the width of the room, and, covering it with something soft, like Canton flannel, stretch it across the ceiling of the room, driving the ends over the uprights, making a close joint. Two similar uprights two feet from the side edges of the stage should then be placed in position. Brace them to the stage, and have them of a length that when bent under the crosspiece stretching across the ceiling they will be firm. Braces, as shown in Fig. 2, should be used to impart the necessary solidity to a structure which must bear the weight of the curtain.

If the stage is eighteen feet deep, nine feet from its outer edge (the footlights) erect similar uprights on the outside, with a crosspiece running the width of the room, covered, as before, with Canton flannel. At the extreme rear of the

stage this arrangement should again be repeated, stays or braces being used to give it additional strength. The three uprights on either side of the stage should then be braced by a board two inches wide and an inch thick running the full depth of the stage. By following out these instructions the entire stage will thus be outlined by a light but firm framework, capable of standing such strain as may be put

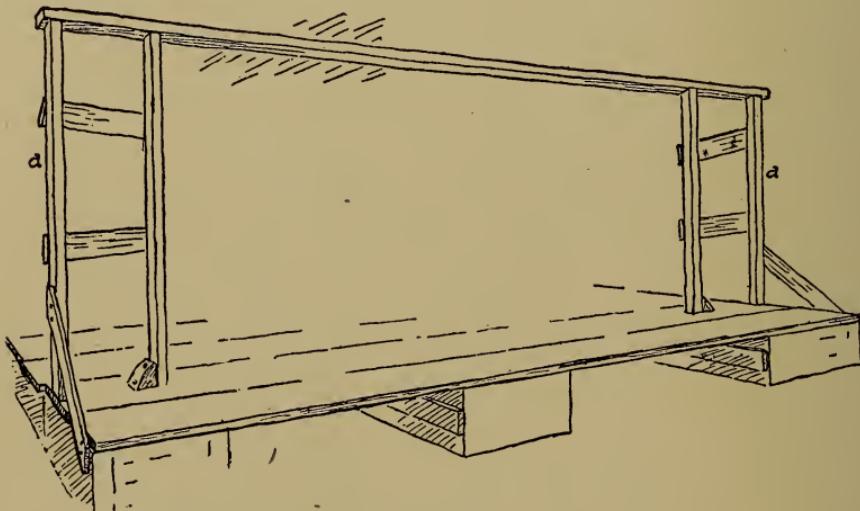


Fig. 2

upon it by scenery, draperies, hangings. It is almost impossible to stretch wires or ropes from wall to wall and get a satisfactory result. They are sure to sag, and will present a most unbusiness-like effect. The method proposed of course entails work and some carpentering skill, but really half the fun of amateur theatricals is in devising effective substitutes for the conveniences to be found in an ordinarily well-appointed theatre.

The Curtain

The proscenium must now be covered and the curtain hung. If any one in the household has an artistic bent, the decoration of this part of the theatre will give his fancy an excellent outlet. The material used to cover this outer frame should be as light as possible. If the stuff is to be painted, white unbleached muslin—or cotton cloth, as it is sometimes called—is recommended. This should first be sized, and water-colors used. If there is no artistic talent to draw upon, something like Canton flannel may be used; the artistic colors it now comes in make it possible to produce with a curtain of a different shade some very pleasing effects. If possible, a curve effect should be given to the cloth which stretches across the opening (Fig. 3).

The curtain once sewed together in perpendicular strips, brass rings should be sewed in (five lines equidistant every six inches from top to bottom). The top of the curtain should then be securely attached to the crosspiece of wood running the width of the room, and attached to the bottom should be a piece of batten (a stick of wood or gas-pipe). This batten should be wider than the proscenium opening, so as to prevent the curtain from getting out of place.

Calling the left-hand side of the stage as you face the audience the prompt-side—that is, the place where the man who prompts and runs the curtain stands—strong white cord is attached to the extreme right end of the batten. It is then passed up through the little brass rings sewed to the curtain, and through large screw-eyes attached to the crosspiece of the proscenium arch. At the left end

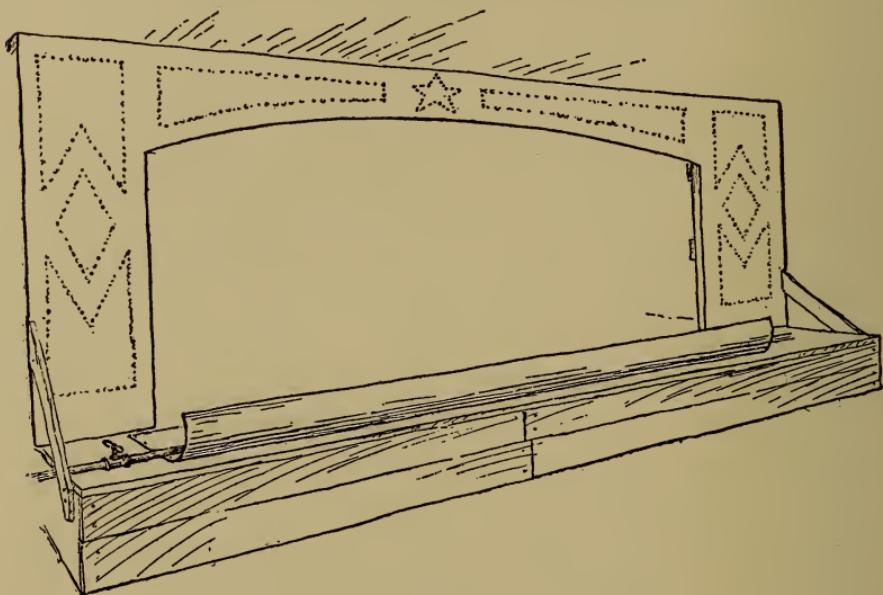


Fig. 3

of this crosspiece should be a large screw-eye, through which the cord descends to the curtain-man's hand. Another cord should then be similarly attached to the batten at the foot of the next row of brass rings, and so on through the screw-eyes at the top down to the curtain-man. Similar cords should then be fixed wherever there is a row of brass rings. The ends of the various cords should then be tied together, leaving plenty of slack to twist around a cleat on the prompt-side, that they may be made fast when the curtain is up. By this arrangement the cords, when pulled, will draw the curtain up in a satisfactory manner; but the man working them should see that the cords retain their relative positions, otherwise the curtain might not fold evenly.

The Arrangement of Lights

The proper arrangement of lights is absolutely indispensable for artistic effects. It is most desirable that it should be thrown upon the faces. It shows off the expression better. Light from above is apt to cast shadows. If there is gas in the house, and the connection can be easily made, it is most suitable for footlight uses. The fact that it can be controlled makes it doubly advantageous. In this way effects of nature can be simulated, and entrances of characters upon darkened scenes with lighted lamps or candles made entirely realistic.

In arranging the footlights every care should be taken to provide against danger from fire. Have the board which covers the support of your stage from the eyes of those in front reach about four inches above the stage. Line the inside of this elevation above the stage with tin, and have the tin extend over the stage its full width, about eight inches, to the rear. This will not only protect the woodwork thereabouts, but will act as a reflector as well. In proportion to your other expenses your footlights and accessories will probably cost you quite a little sum, but the outlay will be warranted by the results you will obtain from having a practical plant. Go to a plumber, and get him to take a piece of regulation-size gas-pipe, cut it off the width of your proscenium opening, and close one end. Then at intervals of eighteen inches have him bore holes in it, inserting in each hole an ordinary gas-plug. It will not pay you to have too many of these jets, because as you will get your gas-supply from one ordinary burner,

there will not be force enough to give you very many flames of any considerable size. Set this pipe on the tin, and fix it firmly by means of hasps and small wooden blocks, so that there is no danger of its toppling over. To the open end of the pipe affix a rubber tubing, tying tightly the joint, that there may be no leakage, and have the pipe run to the nearest side-wall gas-bracket, first removing the tip of the same, that the gas may have as free a flow as is possible. See to it that the tubing passes to the bracket in a way that will prevent its being stepped upon, otherwise your lights will be extinguished, and, very probably, your efforts as well. The ordinary stop-cock on the bracket will thus enable you to regulate the amount of light you wish to throw upon the performers and the scene. If it is not possible to surround each footlight with a little bulbous wire screen, stretch some wire netting, such as is used on hen-coops, from the top of the piece of wood which screens the light from the eyes of the audience to the rear of the tin sheathing (Fig. 3).

If a gas connection is impossible, lamps may be substituted at regular intervals, or candles. If the latter are used, those of paraffine that come sixteen to the pound should be utilized. Of course, neither of these methods will permit you to get graduated effects of light.

Scenery

Scenery is the next important element to be considered. With that arranged for, your theatre will be ready for practical use.

The usual piece adapted for amateur representation has

PRIVATE THEATRICALS

its action take place indoors. Many a good play has to be abandoned by beginners because it is impossible for them to rig up anything that will pass current for a wood, landscape, or seascape, as a view of the coast is called. As a general proposition it may be stated that for a beginning, anyway, a piece had better be selected which calls for an in-door scene.

If extreme simplicity is desired, the use of a back-drop and wings is recommended. If there is to be more than one play, both requiring interiors, it is more desirable to use the same background (much time will be thereby saved), and effect the changes by the use of different hangings, furniture, and bric-à-brac.

The back-drop had better be made on a frame in two pieces covered with unbleached muslin—cotton cloth. A serviceable arrangement would be to make this framework on the outline shown in the diagram (Fig. 4).

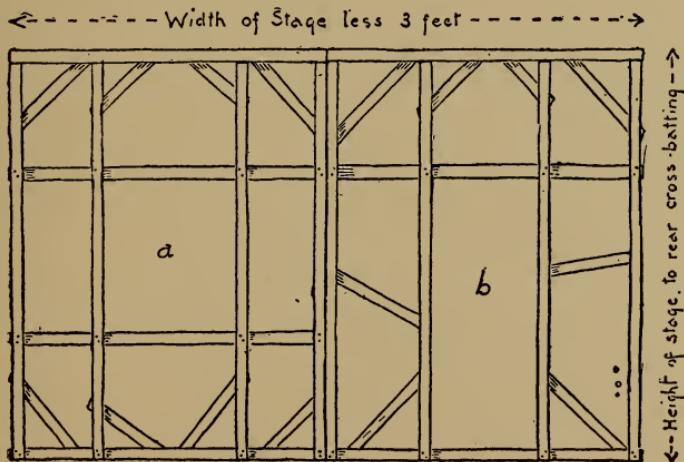


Fig. 4

(a) Open space for window. (b) Open space for door.

The material used should be, if possible, pine-wood strips two inches wide and one inch thick. The joints and corners must, of course, be carefully squared to make a good fit. The frame should then be covered with the cotton cloth, and if the interior to be used is to represent a drawing-room or bedroom, no better method can be devised than to cover this surface with some appropriate wall-paper. For the door and the window separate framework will, of course, have to be made. Painting these to represent the real article will require a study of originals. For the wings, for the average depth of stage in a private house, two on either side will be sufficient. They should be made of the same material as the back frame, and should be similarly covered. To screen the sides they should be placed at an angle to the footlights.

For a box scene the sides should be made similar to the mounted back frame as just described, arranging them in the matter of doors and windows as the action of the average play calls for. This means, as a rule, that there should be at least one door on each side. If necessary, a door opening can very readily be converted into a window opening to the ground, and either one may be painted on a framework covered with muslin, as shown at Fig. 5. For modern interiors it is useless to use other than wall-paper, and for even mediæval interiors something appropriate in the line can readily be obtained.

A kitchen or a garret can also be made out of wall-paper if the amateur scenic artist at hand finds himself unable to cope with the requirements of such a scene.

PRIVATE THEATRICALS

If a palace interior is required, his utmost skill will be demanded. He had better take as a model some picture from a book. The one freest from architectural ornateness is advised. The back frame once covered—as a rule, the entrance in it should be in the centre and have an arch—the cotton cloth should first be sized, and then allowed to

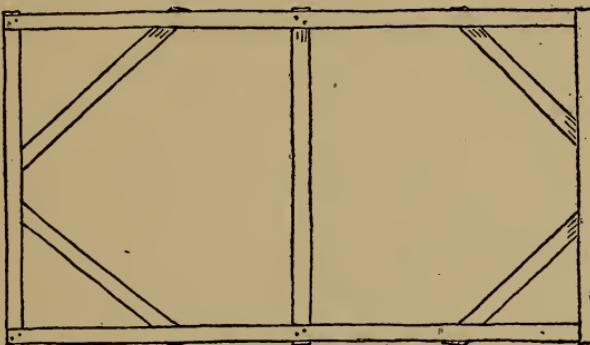


Fig. 5

dry. Sizing is a mixture composed of water and glue, and is laid on with a broad brush similar to that employed by whitewashers. For coloring purposes dry water-colors must be used, mixed with enough water to flow freely.

As before stated, many a clever little play is barred from an amateur's repertoire because an exterior scene representing a garden or wood is required. To paint Nature in her original mood is a severe task for any amateur artist. It is now possible to buy such scenes printed on separate sheets of paper, which can be pasted like wall-paper on some covered frames.

Prompt-Book and Stage-Plot

The good stage-manager is all important; his duties may be thus defined: The play having been selected, he must first make his prompt-book. This is necessary even when printed stage directions are given, because it is not always possible to follow them. Your scenery, in the matter and arrangements of doors and windows, may not be in keeping with those called for in the printed book, in which case it will be necessary for him to work out his own "stage-plot," as it is called. If, therefore, it is a printed book, he should carefully take it apart, and between every two pages insert a leaf of blank paper. He should take a copy-book, or some blank-book of convenient

size, and cutting the play from the paper or book in sections of an equal length, should paste them in regular order on every other page of the book, so that every section of printed matter will have a blank page to the left of it, as shown in Fig. 6.

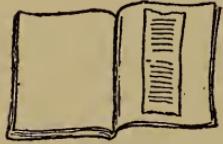


Fig. 6

Before writing down on the white pages the stage directions referring to the printed text opposite, the stage manager should first work out his crosses, movements, bits of business, and exits on other slips of paper, transferring them only to his prompt-book when he finds that they are practicable and what the story of the play demands.

The work of plotting a play requires great patience and not a little work. The stage-manager should first read the play over several times, familiarizing himself thoroughly

PRIVATE THEATRICALS

with its spirit, purport, and object. Then he should endeavor to work out a plan of action that will bring out all these particulars. He should study each character carefully, so that he can determine its exact proportionate value to the story, he should think out characteristic bits of business that will heighten the effect of each part, and he must devise stage groupings of the characters that will make pictures; for a play is really a story illustrated by living pictures. The groupings must be so arranged that the component parts balance each other. Care must be taken that no actor stands in a line with another and so hides him; neither should there be a majority of players on any one side of the stage. They should be so grouped that an artistic equilibrium is always established. Then each page of text must be considered, so that the entrances and exits are all consistently arranged. Thus, if a character goes off through a door on the left-hand side of the stage, say to enter that part of the house set apart for the family, it must be seen that on his reappearance he does not come in through a door which is supposed to communicate with the street. All these little points have to be most carefully considered. Then when an act or scene has been thought out in this way, the exact method of procedure should be set down on the blank page opposite the printed page, so that when the stage-manager comes to drill his forces, he may know just where each character should be during almost every line of the play's text.

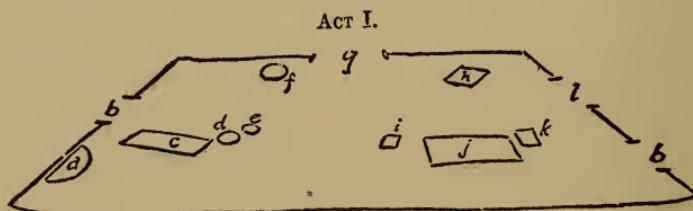
In arranging these formulæ, some stage-managers take a board or table, lining it out with chalk or books just as the ground-plan of the stage is. Then with chessmen or

spools, representing the different characters, they move them about until they get a scheme that is perfectly balanced. Of course when the players begin to actively rehearse, expediency may suggest some changes in the original plan; but a well-worked-out stage-plot will seldom thereafter require change, except in the elaboration of minor particulars.

The Scene-Plot

A scene-plot is a paper which the stage-manager prepares for the use of those entrusted with setting the scenery and furnishing the stage. It describes in detail just how the scenery is to be arranged, where the doors, windows, and fireplaces are to be located, and where the furniture and necessary ornaments, etc., are to be placed. It may also contain particulars as to how the scene shall be dressed and arranged in minor, but really important, details. This includes purely ornamental features.

Taking, for example, an interior scene for some play, the stage-manager would make out his scene-plot in some such fashion as shown in the plan (Fig. 7).



a. Fireplace, mirror over it; ornament and clock on mantelpiece. b b. Doors.
c. Sofa. d. Small table, with writing-materials and bell on same.
e. Light parlor chair. f. Table, with lighted lamp. g. Entrance, with portieres. h. Arm-chair. i. Small chair. j. Table, books and lamp on it. k. High-backed chair. l. Window, with curtains.

Fig. 7

If the play to be acted needs more than one scene, a separate scene-plot must be made for each act. These plots once turned over to the property-man, it devolves upon him to see that each item called for is supplied and put in place on the night of the dress-rehearsal and the actual performance. If the house in which the entertainment is given cannot supply all these particulars, he must see that they are borrowed or hired elsewhere. But in providing them the property-man must be held absolutely responsible. If the production is an elaborate one, he may, and probably will, need an assistant, who will, of course, look to his principal for his orders.

The Property-Plot

The property-plot is also arranged by the stage-manager from his prompt-book. It includes not only the actual furnishing of the stage demanded by the action and business of the play, but the individual accessories needed by the different players. Thus a property-plot would read as follows:

Clock on mantelpiece, R. (R. standing for right; L. for left; C. for centre; R. C., right of centre; L. C., left of centre; R. U. E., right upper entrance; L. U. E., left upper entrance; R. 1 E., right first entrance; L. 1 E., left first entrance, etc.). Writing-materials (pen, ink, and paper) on table, R. Bell on same. Picture of man in uniform, time Napoleon I., on wall, R. 1 E. Cushions on sofa, R. C. Pitcher of water and three glasses on table, L. C. Lamp (lighted) on table, R. of C. entrance. Footstool by chair, L. of table, L. C. Legal documents for Bilkins, the lawyer. Letter for Miss Quotem, Act I. Letter for Miss Quotem, Act II. Bouquet for Captain Illiby, Act. III. Etc., etc.

HANDY-BOOK FOR GIRLS

The personal properties the property-man must see are delivered to each actor *before* each act. The players themselves will have quite enough to think about without bothering over details.

The gas-plot is also arranged by the stage-manager, again from his prompt-book, for the use of the man in charge of the lights, who probably will also have charge of the curtain.

In arranging these various plots, it will be seen that the stage-manager has a great deal of work to do. He must study out each page of his play's text and note down the requirements of every word. It is a long and arduous task that will tax the patience of any one.

Most private theatricals suffer from want of punctuality. If you would interest your audiences, it is necessary to ring your curtain up at the advertised hour and have the waits between your acts as brief as possible. Impress on every one this fact. Allow plenty of leeway, and leave nothing to the last minute. Have everything arranged at least twenty minutes before the hour of beginning, and then the baneful effects of excitement, which are always sure to produce nervousness, will be done away with, and the players will be able to give their entire attention to the work of supplying a smooth performance.

Chapter XXXIII

THE DINING-TABLE

NO one to-day thinks of laying a dinner-cloth for even the simplest family meal without first putting on the pad of wool or felt or asbestos, which both saves the polish of the wood below and gives body to the linen above. But whatever goes under it, the cloth must have a word; the shops are full of beautiful linens, the prettiest having small patterns, clover leaves and blossoms, pansies, fleurs-de-lis, and the dainty old snow-drops predominating. There are round cloths for the circular tables, which now are almost universal, and these hang much better than do the square or oblong shapes when put on a round table. There are lovely cloths to be had with drawn-work or lace centres, but these are not practical, as they can be used for only the most formal of dinners. The plain, heavy damask which grows glossier with age is always best to purchase.

For luncheon there are attractive doilies, and these are seen on almost every table (Fig. 1). There are pretty and inexpensive sets of plain linen, buttonholed around the edge, either with or without a monogram; there are more expensive sets which have an openwork border, fringe, and embroidery, and lace sets which are less durable than either of these. In buying or making any of them there

should be a centrepiece, large doilies for the plates and dishes, and small ones for the tumblers and little dishes, with felt mats to go underneath.

If doilies are not used at luncheon, then a small cloth takes their place, one with a fringed edge, or a band of in-

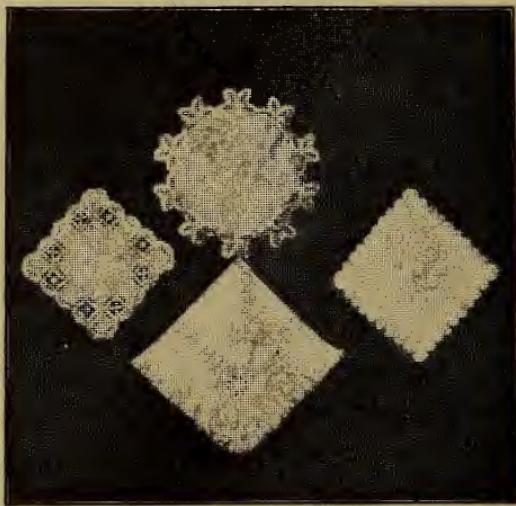


Fig. 1

sertion when there is company; and both for the every-day table and for the formal luncheon the napkins should be rather small. They may be very beautiful, with drawn-work and fringe and embroidery, or they may be damask with a fringed edge, with or without a monogram, or they may be merely a small-sized napkin of the ordinary sort, if the family is alone.

The Setting of the Table

To lay the table for a dinner-party, first arrange your flowers, candles, small dishes for bonbons, almonds, olives,

THE DINING-TABLE

and the like. Candles are used as the fancy dictates. They may be in single sticks, grouped around the flowers in the centre, or there may be two candelabra, one on either side of the flowers. The little dishes are to be put on irregularly toward the central decorations. The cover for each person must have as much space as is possible; about twenty inches from the last fork or knife on one side to the edge of the napkin on the other will be none too much. In the middle lay a large, handsome plate; this is to be lifted and replaced by the hot ones as they come on in turn, being put down as the soiled ones are removed, but the small plate for the canapés; and that for the oysters or clams, and the soup-plate may be laid directly upon it. On the right of the plate, nearest to it, comes the roast-knife, next the fish-

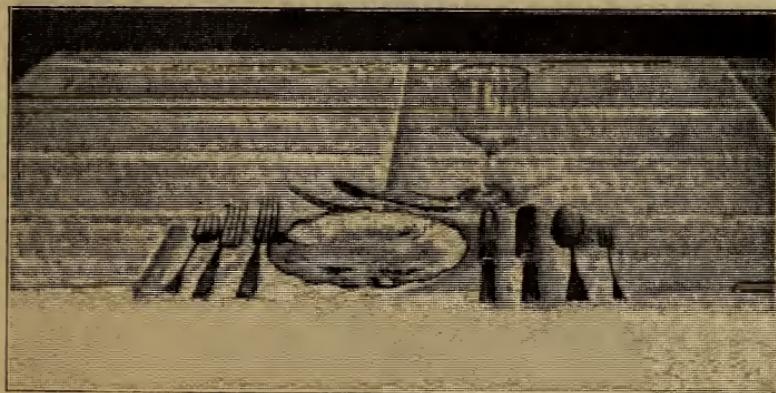


Fig. 2

knife, if one is used; if it is not, then that for the game; two knives are all that are laid at the cover generally. Then comes the soup-spoon, and, last, the small fork for oysters.

On the left is first the large fork, then the second size, then the salad-fork. The napkin is beyond the silver, provided there is room; if not, it should be folded lightly in a triangular shape and laid on the plate; this napkin holds the dinner-roll. All the knives and forks needed beyond those at the cover may be laid down as the meal goes on, except the dessert fork and spoon, which may lie across the top of the place plate (Fig. 2). The glasses are to stand across the top also, the tumbler at the right. Some housekeepers place the oyster-fork at an angle across the ends of the knives and soup-spoon. All vegetables except asparagus



Fig. 3

are served on the meat-plate, so no small dishes are required at the covers on a well-set table in these days. Bread-and-butter plates are not used at dinner.

The Luncheon-Table

In laying the luncheon-table follow the same plan as before. Have a service-plate, and arrange the silver just

THE DINING-TABLE

as at dinner, except that there may be one more fork and one more knife, and a sherbet-spoon may lie at the top of the plate (Fig. 3). There may also be a bread-and-butter plate.

Dinner and luncheon cards lie on the napkin. For a formal meal the dinner-cards are extremely plain; if there is any decoration, it consists of the hostess's monogram in small gold letters at the top. Luncheon-cards, on the contrary, may be as fanciful as one pleases.

Chapter XXXIV

PICNIC LUNCHEONS

TO enjoy thoroughly a summer one should understand the picnic. Too many who might know all about it never really find out its delights. They sit on their porches, or drive, or canoe, and once between June and October with strenuous efforts they have a picnic—a long day in the woods, with a solid meal of bread and butter, cold meat, crumbly cake, and warm lemonade, and they remember the occasion as a duty performed; necessary, but not altogether pleasant.

There is an expensive but truly desirable article to be had at house-furnishing shops which the picnic-lover should own—the hamper fitted with plates, knives, forks, and spoons, cups and glasses, all fastened in so tightly that they cannot slip, and so compactly that there is room for the luncheon as well (Fig. 1). Once bought, these hampers last forever, for the plates and cups are of white enamel, and the first cost is only an investment. Half the trouble of a picnic lies in packing the breakables so that they shall not rattle and chip, and the food which is put in among the plates and cups always emerges much the worse for its experience. However, the ingenious girl who cannot

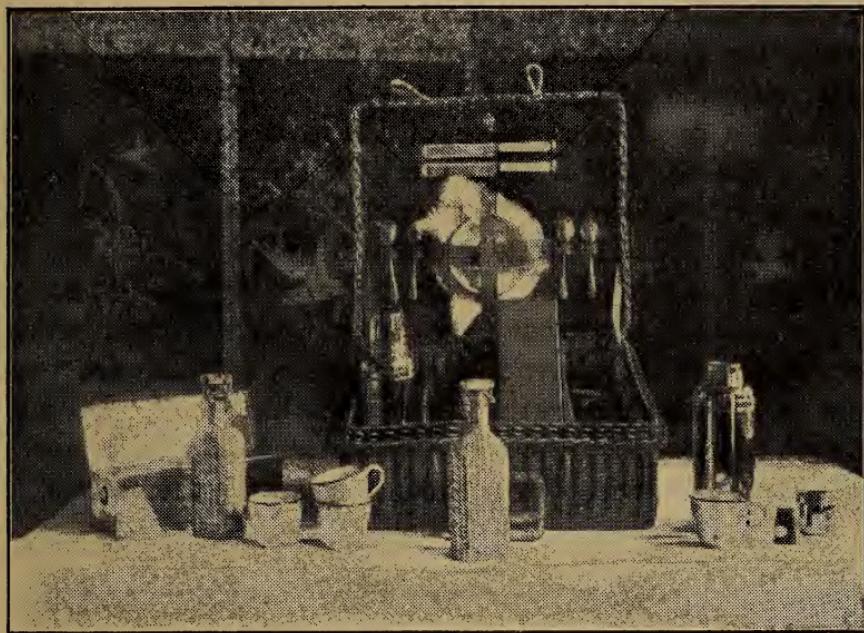


Fig. 1

buy one of these ready-made affairs may take a Japanese-straw telescope bag and have the harness-maker fit it with straps, and not be so very far behind her sister with the hamper.

Getting Ready

In preparing the luncheon, lay out first what will be needed to spread the informal table. Count out plates—wooden ones, unless you have the enamel; stout tumblers; cups without handles, to avoid breaking; knives, forks, and spoons of no especial value; paper napkins; a small table-cloth; and shakers for the salt and pepper. Take the

coffee and lemonade in glass fruit-jars. Have pasteboard boxes for sandwiches, and others for cold meat and cake; put only one sort of food in each receptacle. Be sure to take a good-sized piece of ice in a covered tin pail if you are to have a noon meal; if the picnic is toward evening, then instead of any cold drink have hot tea, by all means. Take a kettle and boil it over a fire, for this is half the pleasure of the occasion; if you are going to some place where you are not sure of wood, take a small bottle of alcohol and still have the tea; a heavy earthenware teapot is a wise thing rather than something frail. Do not forget the loaf-sugar, a bottle of cream, and some lemons; put these last, with the dry tea, in a box by themselves.

The Salad

Begin preparing the luncheon by making the salad, as this can stand better than anything else. A fish salad is a good choice for a picnic, and shrimps make an excellent one. Lay them in ice-water for an hour, then remove the small black string from each one and dry; take hard-boiled eggs, half the quantity of the shrimps, and cut in rather large pieces; make a stiff mayonnaise without mustard, and mix all together. Salmon, freed from skin and bones and drained, may be used in the place of the shrimps. Lobster is also to be prepared with the eggs and mayonnaise in exactly the same way, but a little dry mustard should be added. Chicken salad is always sure to be appreciated; make it, if you prefer, with the chicken which comes in tins, adding the meat last to the eggs and dressing, as there

PICNIC LUNCHEONS

is danger of its becoming mussy. If you wish a salad made without fish or fowl, take the hard-boiled eggs and mix with cut-up olives and mayonnaise. Or take yellow wax-beans cooked whole, well dried and salted, and add a spoonful of mayonnaise from a salad-jar on each plate. As to cold meat, try pressed chicken in a loaf. Make it by simmering a fowl till the meat drops from the bones; arrange this in a mold with seasoning, cook the broth down till it is just enough to fill the mold, and pour over it; this will set firm and may be sliced at the picnic table. Veal loaf is also excellent; and there is fried chicken which has been jointed and skinned, also cold tongue, cold lamb, and ham.

Deviled eggs go well with cold meat when they have not been used in salad; plain hard-boiled eggs are very indifferent eating, and these will repay the little trouble it takes to prepare them. Cut them in two, remove the yolk and mash it with salt, pepper, and a little dry mustard; wet with a very little vinegar, and replace, pressing the two halves together; roll each egg separately in paraffine paper.

If there were no olives in your salad, take a bottle of these, but pour off the brine and rinse them, putting them dry in the bottle, and corking again. Little cucumber pickles are also nice to take, but they must be wiped dry one by one and carried in a box by themselves, or they will scent the whole luncheon until everything tastes of vinegar and nothing else—enough to spoil the finest and most carefully prepared meal. Pimolas, little mangoes, chow-chow, and all the different relishes taste better than usual in the

open air, but one or two kinds are enough to take. Never be induced to take jelly in any form, for it is simply messy on a picnic plate.

One of the most delicious picnic dainties, when a bonfire is to be made, is bacon toasted in the flames and eaten between slices of buttered bread. The bacon may be sliced at home and the bread buttered. Then a forked stick does the rest, and you never tasted anything more appetizing.

Sandwiches

The sandwiches for a picnic should be made with something not too dry. Lettuce spread with French dressing or mayonnaise will come out perfectly moist and fresh. Home-made potted meat is good to use, unless cold meat is taken. Chopped hard-boiled eggs wet with mayonnaise make a delicious filling, but should not be taken if salad is the main dish of the meal. Boned sardines wet with lemon juice, finely chopped cucumbers with French dressing, thin bread and butter, brown or white, spread with caviare, cream cheese mixed with whipped cream, chopped watercress, and simple bread-and-butter spread with mayonnaise or tartare sauce are all delightfully appetizing. The best plan is to have at least two kinds of sandwiches, some with fish or meat, and others with something green or piquant. Sweet sandwiches always seem out of place at a picnic, but if you wish a few, make them with orange marmalade or raspberry jam, using only a little for fear the bread may become wet with the juice.

PICNIC LUNCHEONS

Cake

As to cake, never, never take layer cake to a picnic. Who does not recall the sticky mass of chocolate which emerges from even the best of packing, or the crumby, sliding layers of cocoanut sprinkling every one with bits of stickiness? Only cakes which are firm are fit to be taken on such expeditions. Bake some small round ones of a sponge mixture, or try a loaf of fruit-cake baked in a bread-tin and carried uncut. Or make a soft gingerbread, and just before you put it in the oven cover the top with blanched almonds split in halves; these will sink in half-way, but not to the bottom, and the few which remain on top will only add to the appearance of the loaf; the combination is really novel and good. Then there are crisp, fresh sugar cookies and gingersnaps, and besides these there is something new and most delicious, a sort of sublimated nut wafer: Mix five level tablespoonfuls of sifted flour with a pinch of baking-powder and a quarter of a teaspoonful of salt, and sift again; add half a pound of light-brown sugar, a cup of English walnut meats broken into bits but not chopped, and two eggs beaten together. Spread thin over well-buttered tins and bake in a moderate oven till pale brown; when perfectly cold cut in strips, and then remove these from the pans.

Frappéd Fruits

Frappéd fruits may well take the place of ice-cream at a picnic, and with less trouble in preparation. To make a

HANDY-BOOK FOR GIRLS

freezerful, pack it as usual with ice and salt, but do not put in the dasher. Cut up a few oranges, some white grapes, a banana or two, and shred a pineapple; sweeten and put in two or more tablespoonfuls of sherry, and close the freezer; when you open it stir well before serving. Frozen watermelon is one of the most delicious of the chilled fruits, and in the late summer it is at its best. Choose a very large and well-ripened melon and take out the pulp in large, rounded spoonfuls. Put these in the freezer, and to every layer of the fruit add a half cup of powdered sugar wet with sherry. When the freezer is full, close it, and pack well with ice; this must stand at least five hours before it is ready to use, but it well repays the time it takes.

The suggestions contained in these pages (they can hardly be called more than that in many cases) touch on a wide variety of subjects, and therefore cannot be thorough in each. The plan has been to give to every reader, no matter what her tastes, the chance to experiment in new lines of activity. Should she wish to study any one of these subjects more thoroughly, she will find many books which treat more in detail the branch in which she is interested. The best wish we can leave with her is for a lasting enthusiasm and ultimate success in her chosen field.

THE END

3477-3

LIBRARY OF CONGRESS



0 020 237 148 6